# THE AMERICAN

# MEDICAL MONTHLY

AND

# NEW YORK REVIEW.

JUNE, 1861.


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## ESSAYS, MONOGRAPHS, AND CASES.

### *Report on the Clinic for Diseases of Children, held in the New York Medical College, Session* 1860–61. By A. Jacobi, M.D., Professor of Infantile Pathology and Therapeutics.

When, in the autumn of 1860, the Faculty of the New York Medical College was reorganized, it was thought proper to teach several branches of medical science separately. Infantile pathology and therapeutics was determined upon to form a distinct part of medical instruction, and a special chair was established for that purpose. The large number of infantile patients in general practice, the difficulty of diagnosticating their diseases, the importance of physical diagnosis and close observation applied to their ailments, the modification of physiological, and therefore pathological actions and symptoms, in early life, the care necessary in selecting the remedies and determining their doses in diseases of infancy and childhood, the occurrence of a number of diseases exclusively, or almost so, peculiar to early life, appeared to render this course exceedingly proper. As a special study of infantile diseases has been generally acknowledged to be a necessity, the pro-

fession, in my opinion, has the right of, as well as interest in, knowing in what manner and to what extent the proposed aim has been reached.

The following report will show that the poor of this city and neighboring places have not been slow in recognizing the help offered them. A large number of neglected or obstinate cases were brought to the new institution, some from great distances, to be relieved or cured, and a number of others that had been given up as hopeless were presented for the purpose of obtaining a final opinion. Thus the students of the college have had the opportunity of seeing infantile diseases to a considerable extent; the more so, as particular care was taken to accustom them to diagnosis and selection of remedies. Every single case that was presented in the two clinical hours a week, was given in charge of a member of the advanced class, who had to examine, report, and prescribe, before any remarks were made by the teacher. Then, at last, the case was commented upon for its own merits, by comparison with general experience, and with reference to the theoretical lectures; thus affording, if not a universal knowledge of every disease, the means of learning and exercising a universal scientific method. I am pleased to say that the attention and regular attendance of the class, and their eagerness to visit a number of patients at their homes, have afforded abundant proof of their appreciation of the opportunities offered.

I intend in this paper to pass in review the cases presented as briefly as possible. Such remarks as had to be made during the course, I expect to condense and treat of separately at the end of this report. I intend by this means to express in separate articles my opinions as given in a number of clinical lectures, particularly on subjects concerning therapeutics; selecting, for instance, the use of depletion, mercurials, anti-febriles, narcotics, etc, in diseases of the infantile age. Thus I hope both to serve my pupils and to elicit the always welcome criticism of the medical profession.

Of the reported cases, all such as either terminated fatally or were not watched to their final recovery, will be mentioned; those in which no report to the contrary is given, got well, or were improved.

1. Solomon M., æt. 2 years. *Lobular pneumonia* of left upper lobe, after measles. Percussion dull over left upper lobe, anteriorly, mucous râles on the same side; respiration more or less vesicular on right side. The exudation absorbing, and the child being anæmic and with a frequent and small pulse from no local acute disease, the treatment consisted of sulph. cinch., ℈j; div. in p. iii., a powder every morning, and nutritious diet. The same treatment was continued for three

more days, and followed by syr. iodid. of iron, ten drops three times a day, in a tea-spoonful of ol. morrh. No new exudation took place in the lungs, and the child recovered in about a month.

2. Catharine K., æt. 6 years. *Anæmia;* excoriations at the introitus vaginæ. Is reported to have, in regular monthly intervals, a copious leucorrhœal discharge for several days. Ordered to return at the time of the next discharge, and meanwhile to take pulv. ferri., gr. j., three times a day. Was presented after a fortnight, and reported no better. The same sallow, œdematous appearance, the same listlessness; none of her discharges. The same treatment continued, as was the recommendation of nutritious diet, fresh air and cold water, the want of which is deemed the only cause of the patient's anæmic condition. She looked decidedly better a fortnight afterwards, was stronger and more lively, and had a good appetite. No discharge. All the outward symptoms had disappeared eight weeks after her being presented for the first time.

3. William H. T., æt. 1 year, 4 months. *Scrofulous diathesis* from birth. *Stomatitis, pneumonia* left upper and right middle lobes, anteriorly. *Enlargement of liver.* Father is believed to have been syphilitic. Both parents dead. Child lives in bad circumstances, and looks emaciated and poor. No muscular power, no fat. Extreme dyspnœa. Respiration hurried; meteorismus; external veins of thorax, abdomen and head very much injected. Dull percussion sound anteriorly over left upper and middle right lobes; mucous râles all over both lungs. Submaxillary and cervical glands swelled; some suppurating. Pulse, 120; respiration, 60. Treatment: Fresh air, beef and milk. ℞.—Sulph. cinch., ℈j., div. in p. iii. D. S.: A powder every morning. Presented in about the same condition, after a week; part of the remedy not yet taken, as the druggist had told the attendant it was enough to kill two grown men. The same treatment again ordered. After three days the symptoms less severe; hepatization still in left upper lobe. Smaller doses of cinch. given; the child continued to get better until a new fever set in about a week afterwards. No new physical symptoms found, but as the pulse was again 144, and respiration 44, and a new attack of pneumonia dreaded, ℞.—Hydrarg. submur., oxysulph. antimon., ää. gr. vj., div. in p. æq. xii. D. S.: a powder every two hours. At the same time a daily dose of sulph. cinch., gr. vj.℥, and recommended to go to the country. Patient presented after four weeks, well, hearty, and stout. No pulmonary or hepatic symptoms; ulcerations around the neck closing; appetite good. Nobody able to recognize our former patient. Ol. morrhuæ.

4. Wolf St., æt. 7 months. *Ulcerations* of the folds of the neck, with much loss of substance, and *erythema* around anus; resulting from uncleanliness and the free external use of starch-powder, which is the most frequent cause of simple erythema to be transformed into deep offensive ulcerations. Treatment: cold water instead of starch-powder; application to the ulcerations of ℞.—Sulph. cupri., ℈j., aq. ℥viii. When presented after four days, the erythema round the anus was nearly gone, and the sores granulating and filling up rapidly. Perfect recovery after some weeks.

5. Elizabeth L., æt. 14 weeks. *Syphilis hereditaria, roseola syphilitica, rhagades ani et oris, ecthyma syphiliticum.* The mother has been syphilitic for four years, and is still under treatment. Roseolous eruption visible for the last fortnight, of pink color, round, irregular, confluent, from the scapulæ down to the lower extremities. Five or six ecthyma pustules on back and abdomen. Superficial rhagades of both angles of the mouth; deep ones round the anus. Treatment: submuriat. hydrarg., gr. $\frac{1}{6}$, three times a day; no external applications. A week afterwards the eruption commenced getting paler. The same treatment was continued for about ten weeks, the child gaining flesh and strength from week to week. About the end of this period the child contracted on three spots of the occiput, *tinea favosa*, the favus fungi appearing in large number under the microscope, and required some seven or eight cauterizations with either concentrated acetic acid, or nitrate of silver.

6—7. Two sons of the same mother, born before she was syphilitic, æt. 4 and 15 years. *Scrofula.* Enlargement of the submaxillary glands, upper lip, nose, belly, etc. Ol. morrh., $\frac{1}{2}$ table-spoonful three times a day.

8. Jane K., æt. 6 weeks. *Frenulum oblongatum*, to such an extent as to embarrass nursing. Treatment: incision.

9. Harry D., æt. 3 years, 6 months. *Bronchitis*, general, and with high fever. Oxysulph. antim., gr. ii., pulv. h. digital. gr. j., every two hours; 12 doses.

10. Jane D., æt. 9 months, sister of 9. *Bronchitis*, with the same symptoms. Oxysulph. antim., pulv. h. digital., ää., gr. ss., every two hours; 12 doses. Both were reported to be better three days afterwards. Then took oxysulph. antim. alone every three hours, and were brought back four days later, recovered.

11. Fred. D., æt. 10 months. *Catarrhus intestinalis.* Submur. hydrarg., gr. vj., pulv. Doveri, gr. iv., cret. præpar., ℈ss., div. in p æq., No. xii. A powder every two hours.

12. Catharine W., æt. 6 years. *Pneumonia*, left upper lobe, anteriorly and posteriorly. Pharyngitis; sloughing of tonsils; foul breath; small glandular swellings around the neck. The girl had measles five months ago, and has been coughing ever since. Respiratory murmur tolerably normal over right lung; no dull percussion sound; occasionally a mucous râle. Lower lobe of left lung equally normal; over the upper lobe, left lung, dull percussion sound, and mucous râles in the bronchi; little action of the inspiratory muscles. As the hepatization appeared to be in a process of absorption, it was deemed advisable to leave it to itself and attend to the pharyngeal affection. The deep ulcerations on the tonsils, and the glandular swellings around the neck, small though they are now, arouse the suspicion of a diphtheritic affection having been present. Treatment: chlorat. potass., ℥ss., aq. ℥vj., ½ table-spoonful to be taken every two hours. Patient got better under this treatment; continued for a week, with nutritious diet. Took afterwards, for a week, tinct. muriat. ferri, 12 drops every four hours. Was presented again ten days later, three days after stopping taking medicine, with gastro-intestinal catarrh, apparently from indigestion. At this time no symptoms of pneumonia left.

13. Patrick McC., æt. 11 years. *Conjunctivitis trachomatosa.* Treatment: Solid. sulph. cupri, twice a week.

14. William S., æt. 1 year, 7 months. *Catarrhus intestinalis.* Mild case. Tinct. opii camphor., gtt. x., every two hours.

15. Henry V., æt. 11 years, 6 months. *Tuberculosis*, left upper lobe, anteriorly. Left subclavicular region sunk; dull percussion sound; respiratory murmur diminished; no mucous râles. Respiratory murmur increased on the opposite side. Patient emaciated and pale, thorax narrow. History very defective. No feverish disease known, but is reported to have coughed for the last six weeks only (?) Parents dead; father had consumption. Treatment: Ol. morrh. ℥j. daily. Gymnastic exercise, to enlarge the thorax and extend the lungs.

16. Lena M., æt. 1 year, 3 months. *Arterial nævus* on the forehead, half a square inch in size. By means of a small brush, the following cautery: R.—Hydrarg. bichlorid., ℥j., collodii, ℥j., was applied on October 2d, 5th, and 12th, with perfect success.

17. John M., æt. 4 years, 6 months. *Catarrhus laryngeus et bronchialis.* Croupy cough; mucous râles all over the thorax; moderate dyspnœa; coughing paroxysms in the night. As an expectorant, the following mixture was given: R.—Muriat. ammon., extr. glycyrrh. ää., ℥iij., aq. ℥vj., M. D. S., ½ table-spoonful every two hours. Besides,

tinct. opii camph., ½ tea-spoonful, was ordered to be taken every night Reported to be well the following week.

18. F. N., æt. 1 year, 6 months. *Conjunctivitis scrofulosa, pannus corneæ of the left eye.* The boy is decidedly scrofulous; has glandular swellings around his neck, and is reported to have suffered from discharges from the nostrils and left external ear. Ol. morrh. internally, acetat. morph. in substance applied to the eye. The same treatment, although sometimes interrupted, was followed for several months, the more so as exudation took place on the right cornea also. Intercurring acute swellings of glands in front of the left ear were successfully treated with tinct. iod. externally. Another attack of external otitis, with copious and offensive discharge, was gradually diminished by injections of acid. tannic, ℥iss., aq. ℥vi., and the system generally improved by generous diet and the continued use of ol. morrh. ℥ss. daily, and syr. iodid. ferri, 6–8 drops three times a day.

19. G. A. C., æt. 1 year, 6 months. *Eczema diffusum.* Eczematous eruptions in every state of development on several parts of the body; some being scarcely perceptible; some larger vesicles filled with a clear, transparent liquid; some with thick purulent matter; some dried up, and forming a thick, hard scab. Treatment: Bathing in soap and water twice a day. R.—Pulv. rad. rhei, gr. xviii.; oxysulphuret. antimon., gr. vi. Div. in p. æq. No. xii. D. S.: Two powders daily.

20. Lewis K., æt. 2 years, 9 months. *Imbecillitas.* The boy is reported to have been well developed up to his eleventh month, when he commenced walking. After this time he suffered from numerous attacks of convulsions, 12–20 a day, for a protracted period. What muscular action of the locomotive organs he had before he then lost, until he was nearly two years old. About this time he commenced again to walk, but is unable to speak. His head is pretty small in circumference, forehead low, eyes small, occiput proportionally large. The cranium feels very hard and solid to the touch, and over the region of the large fontanel no local impression, but a general depression of the surface is perceptible. The mother, who has bred children before this one, states that the pulsations in the fontanel have never been perceptible. The case, then, is considered as one of idiocy, resulting from premature ossification of the sutures and fontanels of the cranium, and given up, from a medical point of view, as hopeless, the prognosis being highly unfavorable; for either the child will remain idiotic for life, or will perish from any feverish disease that may occur.

The cranial abnormity, in its bearings on the mental condition of

the child, looks very much like the case reported by Schützenberger, in which the disease lasted about four years, before the continually increasing compression of the hard, compact, and eburneated cranium succeeded in effecting the death of the patient, who had endured all his life frequently repeated faintings, a long series of epileptic and tetanic attacks, abnormal irritability, mental weakness, and, at last, idiocy. Or like the cases reported by Baillarger, who observed three microcephalic idiots whom their mothers reported to have been born with their skulls perfectly closed and solid. Two other of her children, who were well developed, both physically and mentally, had their large fontanel open for a long while after birth. Similar facts he learned from another woman, who was mother of one microcephalic idiot, and of some other children of normal development. Vrolik knew an idiotic boy of seven years whose cranial sutures had entirely disappeared. Cruveilhier relates the case of an idiotic child of eighteen months, without any discernible sutures. Thus the human cranium, without any, or with prematurely closed sutures, is very much like that of animals, of which class a few varieties of apes are the only ones who have for a short while after birth small and rapidly ossifying fontanels. For this very reason Baillarger compares microcephalic idiots to animals, both from an anatomical and pathological point of view. Gratiolet does not even stop here, but asserts that there is a direct relation between the earlier or later ossification of the sutures, in the different races and types of mankind, and the height of their intellectual capacities. He states that the cranial sutures close later in Caucasians than in Negroes, and particularly that the coronal suture ossifies early in Negroes, late in Caucasians. For this reason a proportionally late ossification of the coronal suture seems, *ceteris paribus*, to be favorable to intellectual development. The high forehead also of the Caucasian, and the low one of the Negro type, are evidently depending on this physiological fact, although it may be stated that the synostosis of the sutures is not the only cause of cranial difference in the races; the various characters of the crania, as they are found in different types, being partially formed before the synostosis of the sutures is complete.*

Besides the probability of this boy remaining idiotic for life, there

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*On the Etiological and Prognostic Importance of the Premature Closure of the Fontanels and Sutures of the Infantile Cranium, in *New York Journal of Medicine*, January, 1858, and in Noeggerath and Jacobi's Contributions to Midwifery and Diseases of Women and Children: New York, 1859.

is another possibility. I have found that, although premature ossification of the fontanel and sutures need not of itself absolutely and always produce congestion of the brain or its membranes, which often is the final cause of death in such cases, every child whose fontanel and cranial junctures have been prematurely closed, and who falls sick with symptoms of cerebral irritation or depression, is predestined to certain death. Condie, too, states that when the growth of the cranium ceases, while that of the brain continues, the morbid phenomena resulting from the compression of the brain, which invariably results, may certainly be to a certain extent abated, the comfort of the patient increased, and life prolonged by a proper hygienic course of treatment; but all hopes of effecting a cure must be abandoned. And I have further found, and proved by a number of cases of pneumonia, intermittent fever, etc., that in all cases of children, whose cranial junctures are prematurely ossified, any acute or febrile disease invading the system, slight though the acute intercurring affection may be, offers a most unfavorable prognosis. Thus, in our case, we scarcely know what prognosis is to be preferred, idiotism for life, or an early death.

21. William T. *Ulceration* at the point of insertion of the *frenulum of the tongue*, probably resulting from previous aphthæ. Repeated cauterizations with the solid nit. argent. proved satisfactory.

22. Charles S., æt. 1 year. *Syphilis hereditaria, roseola syphilitica, rhagades ani.* The father appears to have been, or is still, syphilitic; at least the mother impugns him with being the cause of the child's illness. The boy was under medical treatment a number of months ago, with apparently good result. But he again lost flesh, strength, and appetite, and showed the former symptoms, which the mother reports to have been of the same character as these. The treatment consisted of submur. hydrarg. gr. $\frac{1}{6}$ three times a day, for two months; that is, three weeks after all the secondary symptoms had disappeared. For a number of days the child suffered, in the mean time, from bronchial catarrh, independent of his specific disease, and then only the usual formula was changed for: ℞.—Submuriat. hydrarg., gr. iii.; oxysulph. antimon., gr. xvi.; sacch. alb., ℈ij.; div. in p. æq. No. xvj. D. S.: 3 powders daily.

23. John D., æt. 7 years. *Catarrhus Intestinalis*. The diarrhœa having lasted for some time already, and the abdomen generally appearing to be a little painful to the touch, we considered the case as one of consecutive irritation, rather than of real anatomical disturbance. Two drops of laudanum given every three or four hours,

proved sufficient to restore the boy to his general well-feeling, and to remove the serous secretion that still continued.

24. Raphael B., æt. 4 months. *Hydrencephaloid.* The boy has been suffering from a severe intestinal catarrh for a month, and is perfectly exhausted and emaciated. Extremities cold; head very hot; external veins of the cranium congested; large fontanel elevated, extended, and pulsating; scalp wet with perspiration; conjunctivæ injected; pupils contracted; the child moaning constantly; respiration hurried; pulse 140. Evidently the anæmia of the cerebral substance resulting from the general condition, had given way, *ex vacuo*, to hyperæmia, threatening exudation. Treatment: Generous diet; ice to the head; extremities to be kept warm; sulph. cinch., gr. i., acid tannic. gr. ss., four times a day. Injections with brandy into the rectum ordered after the temperature of the head had become diminished. The boy was presented several times during the next fortnight; decidedly not worse; the temperature of head and extremities more equal; excretions more normal, but was finally lost sight of. Depletion or any enfeebling remedial agent or method was carefully avoided.

25. Caroline I., æt. 5 months. *Catarrhus Bronchialis.* Is reported to have suffered from more dyspnœa and fever than when presented. No pulmonary infiltration; mucous râles only. No treatment. Reported to be well after seven days.

26. Julius D., æt. 2 years. *Pneumonia Bilateralis.* Dull percussion sound, and bronchial respiration in the subclavicular region, right side; subcrepitant râle over left lung, inferior lobe, posteriorly. Great dyspnœa; pulse 154; temperature of head high; child has vomited twice. Treatment: ℞.—Tinct. digitalis, ʒiii.; Syr. ipecac., ʒij. M. D. S., 20 drops every two hours. Three days afterwards, dull percussion sound still over both the affected lobes; mucous râles in the right lung. Syr. ipec. alone.

27. Eliza T., æt. 7 months. *Broncho-Pneumonia*, upper lobe, left lung. The greater part of the lung hepatized; mucous râles heard on several places; fever pretty high still, therefore it is thought proper to combine an anti-febrile with an expectorant. ℞.—Pulv. herb. digital., gr. xii.; acid. benzoic, gr. viii.; sacch. alb., ℈j. Div. in p. æq. xvj. A powder every two hours. Was not brought in before three weeks, when there was no fever nor dyspnœa, but dull percussion sound to some extent, and mucous râles. ℞.—Oxysulph. antimon., gr. viii.; sacch. alb., ℈ij. Div. in p. æq. No. xvi.

28. William M., æt. 6 years. *Pleuritic Exudation and Splenization* of the left lung, upper lobe. Has suffered from measles nine

months ago, since then from otorrhœa and cough. No accurate history. Percussion and auscultation show normal results over the right lung and inferior lobe of the left, with the exception of the respiratory murmur on the right side being unusually puerile. Percussion sound over the diseased part exceedingly flat; respiratory murmur much diminished. Treatment: Gymnastics and cod-liver oil. Proper diet.

29. Isabella N., æt. 1 year and 6 months. *Contusion of Shoulder-Joint.* R.—Ol. Camphor.

30. John H., æt. 1 year and 6 months. *Pneumonia Chronica* of the right lung, upper lobe, *Hypertrophia Hepatis.* Has suffered from diarrhœa and cough for five months; is very much emaciated, and unable to stand on his feet. Limbs very thin; cheeks sunk; dyspnœa moderate; abdominal; abdomen enlarged; veins on thorax and abdomen much injected. Dull percussion sound in the subclavicular region, right side, and over the hepatic region up to the fourth rib, over the sternum, up to the heart. Treatment: Generous diet, cool air. Sulph. cinch., gr. v., every morning; Syrup. iodid. ferri, gtt. viii., three times a day, in a tea-spoonful of cod-liver oil. This treatment was continued for two months, (with the exception of cinch., which was given in but six doses,) until both physical symptoms and external appearance proved the boy to be well.

31. Henry H., æt. 9 months. *Pneumonia* of right lung, upper lobe. Hepatization; constipation. R.—Syr. Scillæ compos., 8 drops every two hours.

32. John V., æt. 6 years. *Pneumonia* of left lung, upper lobe. Subcrepitant râle; slight dullness; high fever; vomiting; moderate pain over the affected part. R.—Tinct. rad. aconiti, gtt. vj. every two hours. Was not presented before a week; the morbid process not changed as to place, but character; hepatization fully developed. Loss of appetite and strength perfect; pulse 136, small; respiration 36. Treatment: Wine, beef. R.—Sulph. cinch., gr. xv., div. in p. æq. No. ii. D. S.: A powder every morning. At the same time: R.—Acid. benzoic, ℥ss.; Sacch. alb., ℥jss. Div. in p. æq. No. xxiv. D. S.: A powder every two hours. After three days, the general condition improved, absorption commencing in the hepatized tissue. The case then was left alone, with nutritious diet, and did well.

33. Ann B., æt. 8 months. *Catarrhus Gastricus*, from injurious food. Vomiting, furred tongue, foul breath. Occasionally an acid passage. No particular fever. R.—Bicarbon. sod., ℥jss.; Aq. ℥iii. M. D. S.: A tea-spoonful every two hours.

34. Rachel B., æt. 2 years. *Diphtheritis vaginalis.* Diphtheritic

membranes over the whole vaginal surface, ulcerated appearance of the tonsils, as if exudations had been already thrown off. Treatment: Liq. ferr. chloridi, gtt. viii. every 3 hours; local application of a saturated solution of chlorat. potass. in water, (1:16.)

35. James L. R., æt. 1 year and 1 month. *Œdema pedum ex anæmia.* The boy looks extremely anæmic, emaciated, and œdematous at the same time. Had scarlatina three months ago. Afterwards suffered for six weeks from an exceedingly severe diarrhœa and vomiting. Diagnosis: Hydrops ex scarlatina. Under this impression, the boy was ordered to take, besides nutritious food, tannic acid, gr. ii. 3 times a day. After three days worse. Meanwhile the urine had been examined, and was found to contain neither albumen, nor blood, nor casts. The diagnosis was then changed as above: ℞.—Ferri pulv. ʒj.; pulv. Doveri, gr. vj.; sacch. alb, ʒij. M.—Div. in p. æq. No. xx. D. S.: 3 powders a day. No decided improvement took place before three weeks, the œdematous swelling meanwhile increasing.

36. R. K., æt. 8 months. *Pneumonia* of left lung, lower lobe; hepatization; absorption commencing. ℞.—Oxysulph. antimon., gr. viii.; Sacch. alb., ʒii., m. f. pulv. Div. in p. æq., No. xvi. D. S.: A powder every two hours.

37. R. T. H., æt. 11 years. *Febris Intermittens Quotidiana.* Attacks daily, although intermittent fever at this age will more frequently show the tertian type of adult age. No enlargement of spleen or liver. General health good. ℞.—Sulph. cinch., gr. x. two hours before the next attack. Reported well a week afterwards. The same dose ordered once more.

38. Mary K., æt. 5 months. *Eczema Capitis et Faciei.* Scalp and face partially covered with thick scabs; purulent matter contained in a number of pustules; a transparent liquid in others just formed. This case shows exceedingly well the absence of any intrinsic difference between eczema and impetigo, the vesicles being evidently, by a gradual change taking place in their contents, transformed into pustules. The child has suffered from diarrhœa for two months, and is still pale, and fontanels a little sunk. Therefore, in this case, some care is taken not to suppress the secretion at the scalp suddenly. As a general rule, in very young children, an eruption complicated with a large amount of secretion going on for some length of time, especially on the scalp, must not be suppressed at once, although its cautious removal will not bring on the dangers attributed to it by the public prejudice. Treatment: ℞.—Liq. potass. caust., ʒii.; Ol. morrh., ℥ii. To be applied twice a day over one-half of the diseased surface. The

scabs were mostly removed after a week, when application of Goulard's wash was resorted to, and the same proceeding commenced with on the remaining half. Some eruption and secretion took place a number of weeks afterwards, as it will generally do at this age; but it was treated in the same manner, and never reached any considerable extent.

39. James R., æt. 1 year and 5 months. *Erythema et ulcera colli.* Deep ulcerations in the folds of the neck, the result of carefully abstaining from Croton water, and adding "powder" and sweet oil to a simple erythema. Treatment: Croton water, and ℞.—Argent. nitrat., gr. v., adipis suilli, ʒj.; M. f. ung., to be applied three times a day. Wounds granulating well after a week. Then local applications of ℞.—Sulph. cupri., ℈j.; aq., ʒviii.

40. Robert D., æt. 1 year and 11 months. *Strabismus convergens,* left eye. Operation recommended.

41. Caroline C., æt. 1 year and 6 months. *Catarrhus Vaginæ.* Purulent secretion from the vagina for several weeks, from unknown cause. No dysuria. Erythema on and around the perineum. Aq. plumb. externally.

42. Thomas M., æt. 2 years. *Pharyngitis. Adenitis submaxillaris.* Tonsils swelled, the mucous membrane of the velum palati and the posterior wall of the fauces injected; submaxillary glands tumefied; pulse 110. No membranes found. ℞.—Chlorat. potass., ʒij; aq., ʒiv. M. D. S., half a table-spoonful every two hours.

43. John S., æt. 4 years. *Ulcera colli.* Ulceration of the left side of the neck, of the size of a square inch. Has been observed for five weeks past, and appears, according to the relation of the mother, to be the result of neglected furuncles. Treatment: ℞.—Sulph. cupri., gr. xv.; aq., ʒv. D. S., for external use. Granulations exhibited themselves very soon, and the sore was healed up in about a fortnight.

44. M. K., æt. 5 years. *Bronchitis.* Fever already less, mucous râles commencing to be audible. ℞.—Oxysulphur. antimon., gr. viij.; sacch. alb., ℈ij. M. f. pulv. div. in p. æq., No. xvj. D. S., a powder every two hours.

45. Jane K., æt. 3 years. *Eczema Capitis, Faciei et Colli.* Eczematous eruption in every possible form on scalp, face, and neck. Isolated pustules have been formed wherever a drop of the secretion has come in contact with the healthy skin. The glands of the neck slightly tumefied, general appearance of the child scrofulous. Treatment: Ol. morrhuæ. The scurf to be removed by means of warm oil and soap, and afterwards, to be applied three times a day: ℞.—Acid. tannic,

℥jss; adip. suilli, ℥jss. M. f. ung. Presented again eleven days afterwards; getting better. The same treatment continued.

46. Joseph B., æt. 8 years. *Vulnus Capitis.* Fresh cut wound on forehead. Suture.

47. John P., æt. 1 year and 7 months. *Catarrhus Intestinalis.* Diarrhœa has continued for a week, of a mucous character. No fever, a little tenesmus, number of passages from five to eight. ℞.—Opii, gr. ss.; carbon. calcar., ℥ss. M. f. pulv. div. in p. æq., No. xii. D. S., a powder every three hours.

48. Johanna L., æt. 11 years. *Adenitis Scrofulosa, Eczema Capitis.* The girl is reported to have been perfectly well until four years ago, when she suffered from malignant scarlet fever. Her system appears to have been thoroughly affected, and since that time symptoms of scrofula made their first appearance; cheeks bloated, upper lip and nose thick, submaxillary and cervical glands considerably enlarged, eczematous eruption all over the scalp for more than a year. No other members of the family scrofulous. As in this patient the cause of the scrofulous symptoms is certainly of a general deep-seated nature, having been brought on by the intense general affection produced by scarlatina, it was resolved upon to resort to a general treatment before applying astringents externally. ℞.—Syr. ferr. iodid., gtt. xii., in half a table-spoonful of cod-liver oil, three times a day; animal diet, avoiding of amylaceous food; and soap and water twice a day, besides general baths.

49. Thomas B. *Eczema Diffusum.* A number of eczematous pustules dispersed over the surface, particularly of the lower extremities, probably the result of uncleanliness only. Ordered to bathe in soap and water daily. No pustules a fortnight afterwards.

50. Mary S., æt. 3 years and 6 months. *Hernia Inguinalis Sinistra, Pleuro-Pneumonia Chronica, Pharyngitis Acuta.* The hernia in the left inguinal region was first observed when the child was three months old. As no appropriate treatment was resorted to, it will still protrude during an attack of coughing. Truss ordered. Considerable enlargement of tonsils and uvula, and acute swelling of pharynx generally; fever moderate; constant cough, especially when lying down, probably increased by the irritation produced on the posterior wall of the fauces by the enlarged uvula. ℞.—Chlorat. potass., ℥iij.; aq., ℥vj. M. D. S., half a table-spoonful every two hours; pulv. Doveri, gr. iiss. at bedtime. Acute pharyngitis well after a week, but enlargement of tonsils, and particularly the uvula, still considerable. Coughing spells not frequent, but a short annoying cough after lying down.

Part of the uvula removed, with good result as to the nightly attacks of coughing, and the old pulmonary complaint attended to. The child had measles several years ago, and has been exposed since to a number of pulmonary complaints of either catarrhal or inflammatory character; has coughed almost constantly, and often suffered from attacks of dyspnœa. Respiration somewhat abdominal, circumference of the right half of the thorax less than the left, while the normal condition is the reverse. Right subclavicular region a little depressed, and little action of inspiratory muscles visible over it. Dull percussion sound over the upper lobe of right lung, both anteriorly and posteriorly; respiratory murmur bronchial, audible as it were at a distance. Diagnosis: Pleuritic exudation and (or only) induration of pulmonary tissue, being the result of one or more attacks of pleuro-pneumonia during, or (and) after measles some years ago; as some fever was still perceptible, sulph. cinch. was given for several days, in a daily dose of gr. vj., and a dose of pulv. Dov., gr. iij., was still ordered for some more nights; to be discontinued after several days, and replaced by syr. ferri iodid., gtt. x., three times a day, in half table-spoonful of cod-liver oil; gymnastic exercise to dilate the thorax, nutritious diet. The child gained flesh and strength during the following months, although the physical symptoms of pulmonary disease were never entirely removed.

51. Mary S., æt. 2 years, 6 months. *Synoviitis Chronica Genu Dextri.* Right knee considerably swollen, the circumference being twelve inches; leg inflected; little spontaneous, not much forcible motion; not much pain on pressure, but fluctuation or rather elasticity perceptible, showing a large amount of liquid to be inclosed by the synovial membranes. No particular symptoms of scrofula perceptible; no knowledge of a traumatic injury. The assumption of the latter having taken place is more probable than the former, as there are no symptoms of general disease. The child has always been under treatment, tinct. iodine and vesicatories having been applied to some extent. Treatment: Compression of the knee by means of a bandage. A week afterwards circumference of the knee ten inches. Prescription wanted for some internal medicine, and refused. Patient not presented again.

52. Robert S., æt. 6 years. *Craniosclerosis Rhachitica.* Patient is the son of apparently healthy parents, but his brothers and sisters, of whom there are four, are all more or less rachitic. Developed very slowly while an infant; was late in teething; his limbs somewhat bent in the direction of the flexor muscles, and the epiphyses very much thickened on both radii and tibiæ. His intellect is reported

to have been bright during the first two years, but then commenced to diminish. His eyes are deep-seated and small; the expression of his face dull; his intellect of a very low character; his locomotion clumsy. He is unable to articulate, and the only intellectual power that is left is evinced by his doing mischief. His forehead is large, root of nose thick, circumference of cranium 22 inches; occiput normal, and small in proportion to forehead. Cranium feels very hard and solid to the touch, and its anterior portions are evidently thicker and heavier than normal. Defecation and emission of urine not frequent, but will occur without the patient troubling himself about them. All the other vegetative functions in perfect order. The case must be taken as one of a general nature, the result of vicious general development, and its first origin must be traced back to early infancy. In the first years, when general symptoms of rachitis showed themselves, the bones were soft, succulent, and full of blood-vessels, and the cranium and cerebrum like the rest; whether, however, rhachitic softening of the cranial bones, craniotabes, has really been present, cannot be determined upon; at all events, the bones of the posterior part of the cranium, in which craniotabes is always seen, appear more normal than the rest. After the period of rhachitic, spongy thickening, and consequent mollification, osteoporosis was followed by the stage of rhachitic eburneation. During this period the peculiar osseous cells became more numerous, the layers of the osseous tissue that separated from each other during mollification filling up with them, and the canaliculi got thinner. In the physiological condition, the inner lamina of the bones is said to stop vegetating after the tenth year; and the dura mater does not form new layers before the regressive period of cerebral development takes its commencement, in advanced years. After the fiftieth or sixtieth year of life, absorption begins to lose in power, the brain gets smaller, the veins narrower, arteries wider. If this development takes place in early life, the case is like that before us, without injury to the cerebral functions when the external layer only is affected, but with decided troubles of the cerebral functions, resulting in spasms, neuralgias, paralysis, or idiotism, when the process takes place on the inner lamina.

The case before us is well illustrated by the investigations laid down by Prof. Huschke, of Jena, in his last work on "Craniosclerosis Totalis Rhachitica." Undoubtedly this case does not compare in importance with that published by Prof. H., but the best-developed cases will always do most in illustrating the whole class.

The case of *total* osteosclerosis described by H. is that of a girl

of seventeen years of age, whose skull (the normal weight being 600 grammes) weighed as much as 4,117 grammes. The microscope showed that the medullary (Havers') canaliculi were large, and very numerous on the surface, narrow and very few in the interior of the sclerotic bones, and that the osseous canaliculi were more spherical and irregular in site and shape. The chemical composition was also abnormal, the constituents being phosphate of lime, 65.59; carbonate of lime, 11.12; sulphate of magnesia, 1.14; cartilage, very little fat, etc., 22.15. No fluorate of lime was found. After all, the bones, taken as a whole, proved exceedingly solid, but fragile; when tried in small pieces, very white in their interior, but yellowish on their surface; the latter color being the relic of extravasated blood or other pigmentous matter. Another skull, in the possession of the author, and apparently only in the beginning of sclerotic development, weighed, inferior maxilla excluded, 1,075 grammes; and a third, in the museum of the University of Jena, of the same description, is that of a young baboon, in which all the bones covering the hemispheres had undergone the sclerotic anomaly.

The superior half of the skeleton, in the physiological state, exceeds the inferior half by a greater amount of calcaria. But this prevalence is not only absolute, but also relative, the single bones containing a larger average proportion of earths in general, and lime in particular. There is also a physiological craniosclerosis in families as well as nations; the thickest and hardest skulls being found in African negroes, whose crania, although they be not absolutely heavier than Caucasian ones, undoubtedly have a greater weight in relation to the size of the cranial cavity. Further, the crania of the flesh-eating negroes of Guinea are much harder and heavier than those of Persians and Hindoos. Moreover, it is altogether noteworthy, that the human organism in Africa is throughout prominent for the exceedingly strong development of the substances and organs taking the lowest place in human chemistry and physiology, viz., bone, fat, and sexual organs, etc. Of undoubted morbid total craniosclerosis, there are only ten cases: those of Malpighi, 1697; Cuvier, 1822; Ribalt, 1828; G. Forster and Bojanus, 1826; Ilg, 1822; Kilian, 1822; Otto, 1822; Vrolik, 1848; Albers, 1851; Huschke, 1858. The disease does not affect the auditory bones, the condyles of maxillary and occipital bones, and the styloid process of the temporal bone. There are some symptoms of the disease in the posterior part of the cranium and basis cranii, but most affected are the bones of the face, and the frontal, parietal, and cribroid bones. Thus the disease takes its origin in the anterior portion

of the skull, particularly in the superior maxilla, and proceeds upwards and backwards, terminating in the basis cranii, in the neighborhood of the infundibulum and appendices. Two observers have been so fortunate as to meet with the preceding disease in the living. The average amount of earthy matter is very considerable in all of them. While the normal proportion of earthy matter to organic substance in cranial bones has been found by Professor Frerichs to be = 2.1 (or 1.5) : 1 —it is in the sclerotic bones from 3.5 to 4.4 : 1. Generally, the carbonate of lime is reported to have been found increased, which proved to be the like in spongy bones. All the cases were those of juvenile individuals, or at least the disease had commenced in childhood.

The conditions necessary to the development of cranio-hyperostosis are, first, abundance of lime; secondly, congestion, and sometimes chronic inflammation. It is a characteristic fact, that the bones, the development of which is the quickest after birth, show the greatest disposition to hyperostosis, as the maxillary and cranial bones. Abundance of lime may be produced by such food as meat. One of the patients is reported to have been a very hearty eater. Or, as was the case in Huschke's individual, there is little excretion of lime by the urine. Or there is a metastasis of lime in such a manner that lime is resorbed in certain other places, and introduced into the substance of the cranium. Probably a number of cases co-operate for the same effect. But, at all events, it must be borne in mind, that the pathological process, great though the anomaly may be, is in a majority of cases to be explained by, and to be considered as, an extravagance of normal physiological development.*

As to our case, mild though it be in proportion to those on which Prof. Huschke has written in his excellent monograph, its prognosis is very unfavorable. The pressure on the cerebral substance cannot be relieved by any medicinal treatment.

53. John L., æt. 1 year, 6 months, *Ulcera Colli.* Half a dozen of sinuous ulcerations, of from two lines to an inch in length, around the neck, reported unchanged for several months. No intelligible account is given of their origin, but probably they are the result of plasters and scabs covering a few eczematous pustules, forcing the secretion into the subcutaneous tissue. In order to remove the loose flaps of skin which could not be expected ever to adhere again, they

* Review of Prof. E. Huschke on Cranioclerosis Totalis Rhachetica and Thickened Skulls in general, "with New Observations of that disease. Jena, 1858, pp. 54," and in Noeggerath and Jacobi's Contributions, etc., p. 406.

were repeatedly and deeply cauterized with solid nitrate of silver, and afterwards the whole surface treated twice a week with light and superficial cauterizations of the same kind. At last, for some weeks, application three times a day of: R.—Nitrat. argenti. gr. x.; adip. suill. ʒii. m. f. ung. Granulations formed gradually, and the case turned out well, without leaving a cicatrix except on the spot of the largest ulceration.

54. Mary G., æt. 1 year, 1 month, *Ulcus Frontis.* The child was hurt by a fall four weeks previously. The wound had been maltreated with salves and plasters until a space of a little more than a square inch was in a fair way of ulceration. The surrounding parts, the right side of forehead, was swelled and erythematous, and a little sensitive to the touch. Treatment: Water dressing for three days. After the irritation around the ulceration had subsided, application of: R.—Zinc. oxyd. alb., ʒss.; adip. suill. ʒiii.; a small portion to be applied three times a day.

55. Mary F., æt. 1 year. *Kophosis Nervosa.* Patient is reported to have been a healthy child with the exception of some eruptive fevers, and a small number of attacks of convulsions in early infancy, up to her sixth year. A year ago she appears to have been severely ill, and to have suffered from tonic convulsions ("lock-jaw") for several days, with unconsciousness. She is reported to have recovered very slowly, but to have showed no symptoms of disease except absolute deafness for the last six months. No contractions, no paralysis, pupils normal and equal. On either side external ear normal; tympanum plainly visible, and quite normal; eustachian tube easily entered by the sound. Thus the deafness must be explained by the cerebral disease that had taken place a year ago. Being unable to distinguish the peculiarities of that affection from the poor report given by the mother, it is probably safe to conclude, from the slow and gradual recovery during the first half year, that the disease was one of inflammatory and exudative character; the exudation, of whatever nature it may have been, undergoing a process of gradual retrograde metamorphosis and absorption. Further, from the deafness being unaffected during the last half year, and all the other functions being perfectly normal, it is just as safe to conclude, that the origin of the auditory nerve is still paralyzed by an unabsorbed part of that exudation. Thus, the prognosis is a very unfavorable one, unless absorption may be induced by remedial agents, which is improbable. Treatment: Iodid. potassii, gr. x., dissolved in water, daily. Patient not presented again.

56. John E., æt. 2 years. *Catarrhus Bronchialis.* Expectoration

not so free as desirable, as the cough appears to be hard and a little painful. ℞.—Muriat. ammon., extr. glycyrrhyz. ää, ʒii.; aq. ʒiv., M. D. S.: A tea-spoonful every two hours.

57. Johanna R., æt. 8 years. *Adenitis Chronica.* A number of submaxillary glands and the surrounding tissue swelled and indurated for four weeks. No scrofula. Appears to have had a glandular inflammation of an acute character; no pain; no fever. Treatment: ℞.—Iodid. potassii, ʒii.; glycerin, ℥ss., for external use. This formula has always been preferred to the commonly used salve, as its ready absorption is proved by well-conducted experiments, which cannot be said of the old preparation. Further: ℞.—Iodid. potassii, ʒii.; aq., ℥ivss., M. D. S.: A tea-spoonful three times a day.

58. Henry H., æt. 1 year. *Scrofula, Conjunctivitis et Keratitis Exudativa, Catarrhus Meatus Auditorii Externi.* The general symptoms of scrofula well developed, although the child is but a year old; father said to be consumptive. The inflammation of the cornea has resulted in an organized exudation over the right pupil; both of the external ears discharging freely a whitish purulent matter; no affection of the tympanum. Treatment: Four daily injections into the ears, after they have been cleansed by injecting water, of a solution of: ℞.—Acid tannic, ʒj.; aq, ℥vj. Application to the eye of acet. morph., gr. i–ii., repeated several times a week.

59. Katharine W., æt. 3 months. *Teleangiectasia Femoris Sinistri.* A sanguineous tumor of arterial nature, soft and protruding, but not pulsating, two inches long and an inch wide, on the inner side of the left femur, near the groin. In order to show several operative proceedings on this tumor, the lower two-thirds were covered with: ℞.—Tartar emetic, ℈ij.; emplastr. sapon., ℥ss. Deep pustules commenced to be formed in a few days, and the whole surface was covered with them a week after the first application. They then were allowed to heal up, and cicatrization to commence. The result was satisfactory, no return having taken place for five months. The remaining part was not attended to for the four months following the commencement of the treatment. After this period, an injection was made into the tumor, of a mixture of six drops of Squibb's liq. persulphat. ferri, and eighteen drops of water. Induration of tumor took place immediately, no inflammatory action being brought on, nor any inconvenience produced, but the proceeding had to be repeated before complete obstruction of the blood-vessels took place.

60. Frank L, æt. 4 years and 6 months. *Stomatitis Ulcerosa.* Tongue, cheeks, and soft palate covered with round superficial ulcer-

ations; pharynx injected and swollen; fetid exhalation. R.—Chlorat. potass., ℥ss.; aq., ℥viij., M. D. S.: half a table-spoonful every two hours.

61. William B., æt. 7 years. *Abscessus Capitis.* Large abscess on the top of head, soft and fluctuating; incision. Bone not affected. Water dressing.

62. Mary McK., æt. 2 months. *Cephalhæmatoma.* Large elastic tumor, 1½ inches high, 2½ inches in diameter on the right parietal bone, limited by the coronal and lambdoidal sutures. Was observed on the second day after birth; has increased in size for several days, and then remained stationary. Osseous ring to be felt already; no pain; no discoloration of scalp; child well developed; reported to be treated without success; told that it will get well without treatment.

63. Joseph M., æt. 4 months. *Pneumonia Catarrhalis,* upper lobe of left lung. Patient commenced coughing and sneezing two months ago, and has coughed more or less ever since. A week ago had fever and dyspnœa, which still continues. Pulse 140, respiration 40–48. Mucous râles over the whole left lung; percussion slightly dull over upper lobe. Child emaciated, and not always able to take the breast. Large fontanel a little sunk, and extremities commencing to get cool. Treatment: Half an ounce of pale brandy a day, and R.—Acid benzoic., gr. viii.; sulphat. cinch., gr. iv.; sacch. alb., ℈ii. M. f. pulv. Div. in p. æq. No. xvi. D. S.: A powder every two hours. Both general condition and local symptoms improved after three days, and treatment continued, without brandy.

64. Eliza R., æt. 8 years. *Coryza Diphtheritica.* A year ago suffered from malignant scarlet fever, during and after which time there were large glandular swellings around the neck. At the same time, the nose was obstructed for a long period. Since which, she has had a mucous or viscid discharge from the nostrils, sometimes with an offensive smell. At present no glandular swellings; not even enlarged tonsils, but they look torn and cicatrized. Mucous membrane of the nostrils, as far as they can be examined without instruments, injected, livid, velvet-like. Treatment: Injections, four times a day, of R.—Zinci. sulphat. ℥ii., aq. ℥vj.

65. Francis McC., æt. 5 years. *Tuberculosis* of the right lung, upper lobe. Father died of tubercular phthisis; mother is well; patient is but poorly developed, small and emaciated, chest narrow, subclavicular region a little sunk, hepatic region prominent, and liver enlarged; had measles six months ago, and has been coughing and declining ever since. Dull percussion sound in right subclavicular region and

fossa supraspinata; respiratory murmur diminished, with slight mucous râles; puerile respiration on the left side. The diagnosis supported principally by the hereditary predisposition. Treatment: Generous diet, gymnastic exercise, cod liver oil; general condition apparently improved a month afterwards, but physical symptoms the same.

66. Herrman K., æt. 7 years. *Pneumonia*, right lung, upper lobe; hepatization, fever moderate, dyspnœa not exceedingly great. Dull percussion sound, bronchial respiration, no mucous râles. Treatment: ℞.—Oxysulphur. antimon., gr. xii.; sacch. alb., ℈ij. M. f. pulv. Div. in p. æq. No. xvj. D. S.: a powder every two hours. After three days: Dull percussion sound less extended; mucous râles; same treatment.

67. Elizabeth L., æt. 6 months. *Tinea favosa.* (cf. Case 5.) Repeated cauterization of the fungous deposits, with solid nitrate of silver; and later, concentrated acetic acid.

68. Eugene S., æt. 2 years. *Paralysis Essentialis, Catarrhus Intestinalis.* The lower extremities are almost entirely paralyzed, the extensor muscles apparently more so than the flexors. This paralysis was first noticed two months ago, without any premonitory symptoms. The child is reported to have been put to bed in its usual health, and unable to move the following morning. A number of such cases are recorded in literature, but a larger number have been reported as having been preceded by some feverish attack. Thus antecedent attacks of eclampsia, inflammatory diseases, eruptive or other fevers, have been observed to have been the ultimate causes of infantile paralysis. At any rate, we are not justified in assuming that infantile paralysis has a different pathology and etiology from that of cases of paralysis in advanced life. It depends on the impaired action of some part of the nervous system; it is the residue of a disease progressing with material alterations in either the nervous centres or the nerves, which either suffer from congestion, or inflammation, or extravasation with their consequences. These may be removed, sooner or later, by natural processes; thus, either the paralysis is also removed, or it continues in such cases where the nerves have already lost their irritability. As a general rule, such cases of so-called infantile paralysis have a great tendency to improve; for most cases, when they are brought under our observation, have had time to get a little better than they were at the beginning, in consequence of absorption to a certain extent having taken place. In a small number of cases, more limbs are primarily affected than in the present case, as for instance, all the upper and lower, or an upper and the two lower extremities. But

after a while, the two lower extremities, or even one of them only, remains paralyzed. But here, the spontaneous improvement comes to a stand-still, and even medical service is sometimes unable to render any services in the recovery of the lost muscular functions. This paralysis, therefore, is a very obstinate disease, and yields no very promising results. But life is seldom threatened by it, all the other functions of the patients remaining perfectly normal; so little, indeed, does it prove fatal, that a French author reports the case of a patient who became paralyzed in early infancy, and reached the age of 49 years, and that very few authors have been so fortunate as to have the opportunity of making a post-mortem examination. Rilliet and Barthez made two post-mortem examinations, in which nothing was found that could be taken as the cause of paralysis; and Fliess, in a case of paralysis of the arm, found congestion of the spinal membranes at about the level of the brachial plexus. From the fact that few cerebral symptoms, or none at all, are observed in cases of infantile paralysis, we have a right to conclude that the seat of the affection must be sought for, generally, below this centre. Some cases will be produced by influences acting on the peripheric nerves—for instance, rheumatic ones; and such will be those giving the scantiest results of anatomical examinations—a fact which is easily explained by both the exceedingly great difficulties of detecting material alterations in the peripheric course of the nerves, and the length of time that elapses between the first paralytic attack and death. But the vast majority of cases are of spinal origin. Heine even goes so far as to consider none but spinal cases as entitled to be called infantile paralysis, and to describe it by the name of spinal infantile paralysis. In the spine, the same alterations as found in the cerebrum are met with; extravasations are not so frequent in the brain; but there are cases on record, and cases of spinal congestion, inflammation, and exudation, will occasionally occur in practice. The majority of cases will be met with at the age of from six months to two years, at a period when the growth of the body is very rapid, and particularly the development of the nervous centres considerable. At the same time, it so happens that the first dentition takes place also; and as generally a number of diseases, almost all the diseases indeed of infantile age that do not proffer a very ready explanation or diagnosis, have been explained by and attributed to dentition, this paralysis occurring in children has been attributed to dentition, and has ever been called dental paralysis, with just as little right as we are justified in speaking of dental meningitis, or pneumonia, or intussusception.

In our case, the probability is, that the premonitory symptoms have been overlooked. A mild fever may have been present without having been noticed; at all events, as there neither are nor have been any cerebral symptoms, we cannot seek for the seat of the disease in the brain; as two extremities are affected, both cotemporaneously and in an equal manner, we certainly have no case of an affection of a peripheric nerve before us. Therefore, we are bound to take it as a case of spinal paralysis. The probability in our case is, that it is the result of congestion, and, as it is of pretty long standing, without any spontaneous improvement taking place, exudation—the former alone being well able to produce paralysis, and the latter being likely to be present unless there is extravasation of blood in cases of longer duration, and exhibiting no change.

The question of therapeutics is a very important one, and will be answered according to the diagnosis of the material lesion and the stage of the disease. In the acute attack, with fever and sensitiveness of the spine, etc., local depletion, mercurials, antifebriles, etc., might be indicated. Certainly not so in an old case. Extravasation will scarcely be the object of remedial treatment. Congestion would require, perhaps, local depletion and derivants; at all events, however, such medicinal agents as are known to have some influence in contracting the lumen of the blood-vessels—for instance, quinine or secale cornutum. Exudation would indicate the administration of absorbents, such as mercurials, iodine, and more or less powerful derivants, both external and internal. Loss of sensitiveness of the nerves, finally, without any or proceeding from a past, anatomical lesion, would require the use of such remedies as are known to act as powerful stimulants for the nervous system, such as nux vomica and its preparations; not to speak of gymnastics, active and passive movements, faradization, frictions, etc., for the purpose of re-establishing the functions of the muscles. Thus, indeed, local depletion, vesication, moxæ, iodine, mercury, and strychnia play the most important part in all the essays on the treatment of infantile paralysis.

Congestion, and probably exudation, are likely to have been the anatomical change in or on the spinal column.

Treatment: Passive movements; secal. cornut. recent. pulv. gr. iii., three times a day; increased to gr. iv. after a week, and v. after two weeks, and syr. ferri iodidi gtt. v., viii., x., three times a day.

A decided change for the better already, four weeks afterwards, at which time the patient was presented for an intense pharyngitis; for

this he took for four days the following mixture: R.—Chlorat. potass., ʒiii., aq. ʒvj., M. D. S.: Half a table-spoonful every two hours.

69. Charles P., æt. 7 years. *Anæmia, Morbus Coxarius*, left hip, first stage. Is reported to have enjoyed good health, with the exception of occasional epistaxis, until three years ago, when he had a hæmorrhage, probably from the stomach. Since that time, he is said to have suffered from strabismus, loss of appetite and flesh, and diminution of mental powers. Ten months ago, he had a feverish disease, with unconsciousness and delirium, for thirteen days. Three months ago, he complained for a week of fever and pain in his left side, but has been well since. Skin and conjunctivæ pale, general emaciation, impulse of heart strong, no enlargement of heart, lungs normal. Fell from a chair five weeks ago; complains of pain and stiffness after getting up in the morning, is easily tired, drags his left foot a little, and has pain in left knee and ankle; some pain on direct pressure on the hip-joint, and more by pressing the caput femoris against the acetabulum. The gluteal region of the affected side commences to enlarge, and the fossa intertrochanterica to disappear. Thus, the first stage is on the point of being transformed into the second. Treatment: Five leeches to the hip-joint, to be repeated after four days; Davis' splint; generous diet; cod-liver oil, and ferr. pulv., gr. iv. daily.

70. Rosa S., æt. 5 years. *Microcephalus, Catarrhus Intestinalis, Lienteria.* Has an older brother, and a younger sister, both healthy and well developed, both physically and mentally. Circumference of the head 17½ inches; longitudinal diameter being normal; frontal bone low and narrow; anterior part of the cranium very small in proportion to its posterior; cranium solid and hard; face proportionately large, especially the lower maxilla strong and prominent; lips full and hanging; tongue prominent and thick, constant salivation; no articulation, restless, troublesome, always laughing, breaking anything, passing fæces and urine carelessly; sleep sound, with the exception of sudden interruptions; extreme voraciousness, swallows everything, clean or dirty; a large number of ingesta, food and other, will pass the bowels unchanged; frame robust and strong; the mother knows that this patient exhibited no pulsation over the region of the large fontanel, like her other children. The anatomical cause of this microcephalus and idiotism is evidently a precocious ossification of the cranial sutures, particularly the frontal and coronal. No medical treatment possible.

71. Mary V., æt. 5 years. *Kyphosis* of seventh and eighth dorsal vertebræ.

72. Ann M. L., æt. 1 year, 5 months. *Kyphosis* of the seventh and eighth dorsal vertebræ.

73. Wilhelmine B., æt. 5 years. *Kyphosis* of the last dorsal vertebræ.

74. John G., æt. 2 years. *Kyphosis* of twelfth dorsal and first and second lumbar vertebræ.

75. Thomas D., æt. 8 years. *Kyphosis* of lower cervical and upper dorsal vertebræ.

76. John K., æt. 2 years, 8 months. *Kyphosis* of seventh cervical and first and second dorsal, and of twelfth dorsal and first and second lumbar vertebræ.

All these cases of Pott's disease that were presented at the clinic, had so many symptoms and peculiarities in common, that they may safely be mentioned together. Scarcely in any one of them was there a scoliotic deformity combined with kyphosis, and there was only one case out of six not decidedly scrofulous. Only one out of the whole number had the same affection in two different parts of the vetebral column, viz., No. 76. He had never been a thoroughly healthy boy; the first symptoms of rhachitis still perceptible in the enlargement of his epiphyses and curvatures of his legs; he further had been suffering from pulmonary troubles since he had measles, when a year old. Mucous râles are still heard on both sides; bronchial respiration in the upper lobe of right lung, and decidedly dull sound in right subclavicular region. During the time he was presented, we had frequent occasion to prescribe for a new attack of bronchitis. He was extremely emaciated, his submaxillary glands much enlarged, and eyes suffering from chronic conjunctivitis. Three months after he was first presented, he all at once, in addition to his former sufferings, showed symptoms of the second stage of morbus coxarius. About a week after this, he was taken ill with an acute feverish disease, probably of one of the thoracic organs, the nature of which may, or may not, have been explained by a coroner's inquest, no medical man having been in attendance to make a diagnosis.

In almost all the cases, a fall was accused of having been the *causa proxima* of the affection. Pain over and in the neighborhood of the affected vertebræ; moderate fever; sometimes hyperæmia of the skin; immobility of the vertebral column; disinclination to walk or stand; tendency to support the body by pressing the hands down on the femur; absence of almost any symptoms of spasm, or paralysis, or suppuration, were found uniformly in all of them.

The treatment was somewhat uniform also; at least, as to the

care given to the general health. Generous diet, cod-liver oil, and, in the majority of cases, the internal use of iron or quinine. Quinine was generally given as a tonic, in more frequent and small doses; in some cases in single daily doses, of from five to eight grains, as an antifebrile. The patients were kept in a horizontal position, on their back or side, for a sufficient time to reduce the acute pain, and at the same time, in some cases, leeches were applied repeatedly; in others, tinct. iodin. for some time. Then, at last, an apparatus was advised, and usually made by Messrs. Otto & Reynders, to support the trunk without inconvenience to the inflamed vertebræ, and without the least direct pressure on the curvature. In one of the cases its effects in removing the pain, evidently produced by spasmodic action of the longissimi dorsi, etc., was wonderful; the child had complained of this pain continually, both in the erect and the supine positions, before the use of the apparatus, but was so entirely relieved while it was on, that she refused to sleep without it.

(To be continued.)

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*Absence of the Uterus—Three Cases in one Family of Five Sisters.* By R. NELSON, M.D. NEW YORK.

(Read before the Medico-Chirurgical College, March, 1861.)

Out of a family consisting of five sisters, the first, second, and fourth had no womb; the third and fifth had. In this paper I shall give them for names the first five letters of the alphabet.

Mrs. A. is a widow, tall, bony, slim, brown hair, dark sparkling eyes, very fair skin; the face being meagre, gives the mala an appearance of prominence, which are permanently of a high rose color; lips thin, very regular and white teeth, which are exposed in talking and smiling; mammæ small. Altogether her appearance is very attractive.

Mrs. B. is a widow also, light hair, gray eyes; in other respects is similar to Mrs. A., but less pleasing and attractive.

Mrs. C. is married and the mother of three children; dark hair, blue eyes, very fair, rosy complexion, full mammæ, limbs and body well filled out; lips are fuller than A. and B.; when she talks or laughs, her mouth and fine teeth waken up a strong resemblance to the first two.

Mrs. D. has been a widow and has now a husband; she is of middling height, rather spare, small mammæ, dark hair, blue eyes, very fair; some color in the face; lips thin; mouth and teeth perfectly beau-

tiful, which, when she speaks, show, and give her a resemblance to her sisters; she is very genteel in manners and appearance.

Miss. E. is about 17 years of age, rather short, full, mammæ developed, hair lighter than dark; eyes blue, mouth and teeth beautiful, very fair and rosy.

Among these five women, A. B. and D. are spare of flesh, and are the three who have no womb; C. and E. are fleshy, and without defect. In speaking, they all show the teeth, and there is a resemblance of voice in all, which is rather loud and gay.

The two eldest, widowed sisters, and the youngest one, unmarried, lived together. I knew and attended them for two years, not suspecting anything out of the way with them, nor did I know that they had any relatives when I became acquainted with them.

Mrs. D., the fourth sister, and the first one I discovered of having no uterus in the following manner: A lady about 23 years of age, of very genteel appearance, called on me, and said she wished me to operate on her for "a skin that obstructed the passage to the womb." Before examining her, I inquired about the catamenial discharges; she said that she never had had any; that she had no pelvic tumor; that she was quite well, only that she was desirous of having a baby, and wished to have an obstructing skin cut so as to open a passage to her womb, which she was sure would give her the only happiness she was destitute of. Inquiring about her marital relations, she answered that her first husband and the present one were quite satisfied with her, had frequent connections, and never complained of anything being wrong with her. She was so convinced that she was like other women, excepting the obstruction, and so desirous to have it removed in order to become a mother, that she was very communicative, and answered without the least hesitation or embarassment—at the same time with perfect modesty—all questions. Said her sexual desires were frequent; that her connections were pleasurable; so much so, that in the absence of her husband, and in her widowhood, so great were her desires, that she was compelled to acts of self-indulgence; that for a few days, about every three weeks, her mammæ, which are rather small, became fuller, sensitive, and if handled produced a pleasurable excitement.

On examining the parts, the vulva appeared small, and the pilosity scanty. The genital fissure was of limited extent, the vagina scarcely lubricated, and so short that the extremity could be reached with a little more than the first joint of the finger; but by pressing strongly it would yield so as to admit the length of the whole finger; it was a

blind sack, without rugæ, and of a pale color. The clitoris was natural, the nymphæ very small. By the finger, no hardness or anything indicative of a uterus could be felt. A catheter in the bladder and a finger in the rectum gave no assistance in the discovery of one. I ventured to assure her that she had no uterus, but she persisted that there was one—there must be one—how else could she have her strong desires? how else the great pleasures? The reply was, that the absence of a uterus did not exclude the presence of ovaries, which were the authors of desires and sensations; besides that, were there a uterus with such desires as she said she had, the catamenia would occur, and finding no outlet, would in time produce a large pelvic tumor that would press into, and present at the vagina, scanty as it was. None of these remarks satisfied her. All the foregoing details were not elicited at the first visit, but in the course of several that she made; as already remarked, she was communicative without hesitation or shyness, though with modesty and a decency indicative of conscious propriety, and an anxiety for relief.

To gratify her wishes, I consented to operate, and for that purpose procured the aid of a French practitioner of extensive obstetrical experience, a perfect anatomist, and an able man. As her vagina, by repeated use, had become very extensive, it was easy to insert my bivalve speculum, the flat blades of which, separating to any possible extent, rendered the fundus of the vagina tense like a straight wall, and affording space for sight and free movement for instruments. By reason of the tenseness rendered to the membrane, a crucial incision was easily made through the thickness of the membrane. While the speculum was in situ, and after its removal, the finger, worked about and pressed into the cut, could detect no resisting body, such as a uterus, if present, would afford.

Several weeks after this ineffectual operation, the cuts having healed, the patient still anxious and dissatisfied, became so importunate, that for peace sake it was repeated, with no better result than the first time. As yet I did not know who the lady was.

Mrs. C. is the third sister. I was sent for in a hurry to see a lady in labor, not knowing who she was. I attended, and in half an hour she was delivered of a good-sized boy, her fourth child, all living. The expression of her mouth and teeth made me think I had seen her likeness before, and on going into the parlor I was surprised at seeing Mrs. A. and B., both of whom, and Miss E., I knew well and had previously attended; they were now on this birth-visit to the fresh confined sister; presently walked in from another room, Mrs. D., my

obstructed patient, who now, for the first time, I discovered to be one of the same lot of sisters.

Mrs. B., the second sister. Shortly after the accouchement of Mrs. C., I was sent for by Mrs. B. on a Sunday forenoon, when her sisters were gone to church. About a year before this she suffered for the second time from an abscess in the right labium, which I opened, giving exit to the usual fœtid and black matter mixed with white. She said: "I have long wished to consult you about a peculiarity I have, and have taken this opportunity while my sisters are out." Her story was exactly the same as that of Mrs. D. On examination, the same state of the parts existed as already described. She, too, had enjoyed marital pleasures during her married state, was now courted, and, before going farther with the negotiation, wished my advice as to the possibility of removing the obstruction. I now ventured to make mention of her sister's case to her, which surprised her, never having had any intimation of it. I said to her, "your other sister, Mrs. A., has been married, but has had no children; can she be like you?" Her reply was, "I do not know, only, like me, she has never had the discharges usual to women, which my sister E. and the one lately laid-in regularly have."

After this I had frequent opportunities to talk with the three about this matter, and always to the same effect.

Lastly, Mrs. A. about this time was courted by a merchant, a widower nearly fifty years of age, in a reputable position and well off, who married her. He appeared to me quite satisfied with his wife, a most desirable woman in all other respects than the deficiency alluded to; and which Mrs. B. remarked to me she thought to be rather an advantage than a loss, considering their ages, as he already had children to look after. I may mention now what ought to have been noticed in describing the case of Mrs. D., that her husband "preferred having her as she was," since they would not be embarrassed with a family.

There was a striking family resemblance in the features of the five sisters as regards the mouth and teeth, also the voice; they were all rather loud-spoken, very chatty, gay and attractive; but the three without uterus were spare women, while the other two differed much as to *embonpoint* and full mammæ. Being all still alive, no verification by dissection has been had; but most careful and varied examinations have been made frequently, and nothing felt indicative of a uterus; the absence of catamenia and consequent pelvic tumor are facts corroborative that none exists.

In the *Lancet* for August 18, 1832, a case of Dr. Macfarlane, of

Glasgow, is reported, verified by dissection after death, that followed an operation performed with the intention of making a vagina. In this case, like in the above, there had never been catamenia, though sexual desires were strong, the mammæ and pudendum well developed, and her husband contented. Many like cases are to be found on record, but the foregoing are interesting as all occurring in one family.

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*On Anatomical Preparations, being a Thesis for the Degree of Doctor of Medicine, in the New York Medical College and Charity Hospital.* By JAMES ELNATHAN STEEL. 1861.

In the study of anatomy, which is one of the most important branches connected with medical science, it is obvious that the use of prepared anatomical material is of essential service. Nothing, in my opinion, can give such skill, confidence and general success in practice as a perfect familiarity with every variety of specimens; and that those specimens should be prepared in the most natural, useful and lasting manner, every one will admit. The giant strides of the science of anatomy and surgery in the last century, have been owing to the increased facilities for dissection and the improvements in prepared material.

A collection of well-prepared anatomical specimens is a library of nature to the student, and if studied with a true spirit of inquiry, cannot fail to prove to him of almost incalculable benefit. Though pictorial illustrations are, indeed, almost indispensable, yet it still remains for the *subject* itself to clear up any doubts that may exist, and stamp upon the mind the true nature of its specific character. In a *bone*, for instance, the *processes foraminæ*, and even the *tissue* itself, are presented in an unmistakable manner. The fresh *subject*, it is true, is of the greatest importance; but as the study of anatomy begins with the *skeleton*, any further comment upon the necessity of its being properly prepared would be superfluous.

In preparing a skeleton, it is necessary, in the first place, as far as conveniently practicable, to remove all the fleshy particles with the scalpel. Holes should then be made in all the bones that contain any medullary substance, in order to allow the macerating fluid to have access thereto. The skull should be disarticulated from the atlas, and the brain taken out through the *foramen magnum*. Then all should be placed in a vessel of proper size, and covered with a solution of quicklime and water—℥viii. to the gallon—and allowed to remain for

ten or twelve days. (The solution should be changed three or four times during the process, to accelerate decomposition.) The skeleton is then to be extended on a table, and the remaining particles of *fibrin* carefully scraped away. In this way the bones can be made quite clean, and with little care the connecting ligaments preserved, which will, when dry, answer as means of support.

In preparing fœtal skeletons, the brain may be extracted through the *lambdoidal suture*, instead of disarticulating the head, and the macerating solution should be made somewhat weaker.

The process of *cleaning* is succeeded by *mounting*, or giving the skeleton a proper attitude, which is best accomplished by placing it in a frame of convenient size, and supporting it with wires of sufficient length and thickness, the principal one being placed in the centre of the frame, and the curves given to it that are naturally required by the vertebral column, to which it is to be fastened. There should be holes made in the frame, so that wires may be passed through it in different directions, and in this way the whole skeleton can be kept in position until dry, after which it may be placed upon a proper stand and removed to the museum or elsewhere, as varying circumstances or convenience may require.

There are various ways in which disarticulated bones may be prepared; but the quickest, and probably the best, is to boil them in a solution of carbonate of potassa and water—about ℥vi. to the gallon. This will free them from all extraneous matter, and make them tolerably white. After having been subjected to the foregoing processes and made quite clean, they can be made still whiter by placing and keeping them in an oven until they shall have become quite hot, when they should be taken out, and sulphuric ether applied to their surfaces with a brush, which will have the effect of giving to them a really beautiful appearance.

A thorough knowledge of the different forms of articulation, and how the bones are approximated, could not, probably, be more readily attained than by artificially articulating a skeleton, which may be accomplished as follows:

A rod of iron should be provided, sufficiently strong, and long enough to reach from the coccyx to the top of the head, through which it is to project about half an inch. This end is furnished with a screw and a nut. The coccygeal extremity must be made small and round, and furnished with a screw, but no nut—the small bone, which can be screwed on, answering in its stead. Having made corresponding holes in the sacrum and coccyx, the iron is passed through,

and the small bone screwed against those preceding it. The vertebræ are then placed in position, and leather substituted for the intervertebral substance. The head should have a hole made in it corresponding with the centre of the *foramen magnum*, and, being placed upon the atlas, it is kept in position by means of the nut, that had been previously arranged for the purpose. The ribs, the sternum, clavicle, scapula, carpal, metacarpal, tarsal and metatarsal bones, and the phalanges, are connected by wires, passed through them and twisted. The ginglymoid joints may be neatly articulated with brass hinges, fastened into slits made in the apophysis of the bones with a saw. The circumrotatory motion of the enarthrodial joints may be well imitated by an apparatus consisting of a spring fastened in the medullary canal of the *humerus* and *femur*. A piece of catgut, attached to one end of the spring, is passed through a small hole in the centre of the head of the bone, and secured in the centre of the glenoid cavity and acetabulum. This arrangement will allow of the necessary motion of the joint, and the head of the bone may be drawn from the socket and dislocation assimilated, the spring always causing it to resume its natural position as soon as the force is removed.

For fastening any pieces of bone that may have become detached during the above stated processes, the following cement will be found very useful:

℞.—Fellis bovinum, . . . . ℥l.
Cretæ, . . . . . .
Pulveris acaciæ, ää, . . ℥ii.
Tritici vulg., . . . . ℥ss.
Aquæ qs., et fiat massa.

In preserving sections of the human body, no method is preferable to that of immersing them in spirits, taking care, however, that they be perfectly cleaned, and so placed in the jars that no part of them shall touch the sides, as such parts become discolored and corrupted. The arteries, veins and nerves may be covered with a varnish made by dissolving sealingwax in pure alcohol. This varnish dries quickly, and will not re-dissolve in the preserving spirits, the strength of which, being necessarily weakened by dilution, will not probably be more than 40 or 50 per cent. Some persons recommend camphorated spirit, which undoubtedly is preferable for small and delicate specimens, inasmuch as it has generally the effect of toughening them. The jar enclosing the specimen about to be preserved, must, after some days, be replenished with spirit, and then firmly closed with a cork stopper. Glass stoppers frequently break by the evaporation of the liquor.

The luting, called "lithocolle," with which the cork is to be covered and the evaporation prevented, is composed of the following ingredients, viz.: common resin, red oxide of lead, yellow wax and oil of turpentine. The resin and wax are melted, and the red lead added in small portions, stirring briskly at each addition. When the mixture has boiled five minutes add the oil of turpentine, and continue to boil the whole for five minutes longer. Care must be taken in preparing this composition, on account of its inflammability. A lid should be at hand, in order to cover the vessel if it should take fire. After having corked the jars and wiped them well with a dry cloth, the *lithocolle* is heated to the boiling-point, and, being well stirred, is applied over the whole surface of the cork with a brush. Sometimes the cement, by penetrating the cork, causes the spirit to evaporate, bursting the surface and thereby occasioning small openings to appear, which, however, are stopped by passing a second coat of lithocolle over the first when it is cold. The mouth of the bottle may be further secured by the addition of an outer covering made of linen, firmly tied, and saturated with liquid pitch. Jars thus preserved may be turned over in all directions, and exposed to the strongest atmospheric heat, without the least perceptible evaporation or escape of the spirits.

Dried specimens are of little value, unless their durability is secured by judicious preparation, in the first instance, and by watchful attention after they have been placed in the museum. In most instances, the careful performance of the former is necessary to secure the success of the latter. During the last two centuries, the art of preserving this class of specimens was but little understood; and to this cause must be attributed the destruction of many extensive and valuable collections. The merits of the two following compositions are now sufficiently established to warrant their adoption in preference to all others. For the arsenical soap invented by Becœur, of Metz:

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|---|---|
| ℞.—Acidi arseniosi, . . . | ℔i. |
| Potassæ carbonatis, . . | ℥vi. |
| Cretæ, . . . . . | ℥ii. |
| Camphoræ, . . . . . | ℥iii. |
| Saponis, . . . . . | ℔i. |

Cut the soap into thin slices, and put them, with a little water, into a pot, which place upon the fire, stirring frequently with a wooden spoon until dissolved; then add the carbonate of potassa and creta; take it off the fire; add the arsenious acid, and stir it well; lastly, put in the camphor, which must be pounded in a mortar, with a little alcohol. This composition has the consistence of ordinary flour-paste.

When required for use, two ounces may be dissolved in a pint of alcohol, and applied with a brush. The antiseptic qualities of the following composition (invented by M. Laurents) will be found of sufficient strength to answer any indication:

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|---|---|
| R.—Potassæ arsenitis, | |
| Aluminæ sulphatis, | |
| Pulveris camphoræ, ää, | ʒii. |
| Saponis, | ʒss. |
| Alcohol, | ʒvi. |
| Ol Thymi, | gutt. iii. |

The soap should be powdered, and then placed in a bottle with the arsenite of potassa and sulphate of alumina, and the alcohol poured upon them. In twenty-four hours they will be perfectly combined. The oil of thyme is then added, and the bottle carefully corked and labeled.

As it is extremely difficult to inject a whole subject thoroughly from any one point, in order that the vessels should be properly filled, we shall find it necessary to throw in the injection from different points. If, for instance, we wish to prepare one of the lower extremity, the arteries should be injected from the iliac, just where it leaves the aorta; and the veins from two or three, which we may select, upon the dorsum of the foot. To inject an arm, we may select the subclavian artery, for the arteries; and some of the veins on the dorsum of the hand, for the veins. The veins should always have some hot water forced through them, to remove the clots, before throwing in the injection. The veins of the liver may be injected from the ramifications of those of the mesentery; or the veins of the intestines, from the trunk of the vena portæ. There are no valves in the veins of the intestines, and, consequently, this injection will be easily made.

A very good composition for the injection of the vessels of the viscera is a strong solution of glue, colored with red lead; or an injection made of tallow and turpentine varnish. As both of these compositions, when used, must be warm, it is necessary to heat the vessels of the abdomen, which is most easily effected by making an opening into the intestines, and injecting a quantity of hot water into them.

There are other compositions generally used for injecting the arteries and veins of the trunk and extremities. The one formerly thought to be the best was the *wax injection*, colored with blue or red; but a much better and cheaper one is made of

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|---|---|
| Tallow, | lbs. ii. |
| Magnesia usta, | ʒi. |
| Vermilion, | ʒi. |

If this is needed for the veins, it may be colored with blue smalt, instead of the vermilion. This composition possesses all the advantages of the *wax* injection, without any of its inconveniences. It is nearly as transparent as the wax; never melts in the hottest weather, and is not disposed to crack. If used very hot, an extremity, not previously heated, may be injected.

The *cold paint injection*, if well thrown in, seems to fill the minutest arteries better than any other. It is made of

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|---|---|
| White Lead, well ground, - - | lbs. ii. |
| Turpentine Varnish, - - - | ℥xii. |
| Boiled Linseed Oil, - - - - | ℥vi. |

The lead is intimately mixed with the varnish; then the oil is to be added, and the whole to be well mixed up together to the consistence of paste, and in this state to be thrown into the arteries.

The dissection of the *lymphatics* is very easily made when they are injected; but to do this is, perhaps, one of the most difficult operations of practical anatomy. In consequence of the valvular structure of the lymphatics, it is necessary to inject from the extremities towards the trunk. In injecting an arm or leg, we ought to begin as near the fingers or toes as possible. It is necessary, before commencing, for the assistant to see that there are within his reach sharp-pointed scissors, knives, forceps, lancets, pokers, (for tubes,) needles and waxed thread, so arranged that they can be used instantly; for it will often happen that it will be almost impossible for either the assistant or operator to remove his eye for a moment from the vessel, without losing it. Everything being arranged, the foot or hand is to be placed in a tray, that the mercury which falls may be caught. The foot ought to be a little more elevated than the groin, to assist the flow of mercury to that part. With a sharp scalpel a portion of the skin is to be cut off horizontally, so as to expose the loose cellular texture; for in this texture are the superficial lymphatics generally situated. If, as is very often the case, we cannot find one near the toes, we shall probably discover one running across the saphena magna, on the instep. We must then take hold of it with the forceps, and dissect it from the surrounding substance. (To secure the keeping of it, we should put a needle with a fine waxed thread under it.) Having still hold of the vessel with the forceps, we should snip it half across with fine scissors, and into the cut made by the scissors introduce the fine poker, which is made for clearing the pipes. We should now take from the assistant's hand the tube containing the mercury, with the stop-cock already turned, and let the stream of mercury play

on the side of the poker, which will generally so direct the stream that it will enter the vessel. When we have once succeeded in getting a few drops of mercury into the lymphatic, it will be easy to get the pipe into the open mouth of the vessel, and then the poker may be withdrawn. If the vessel into which the pipe is introduced be large, it ought to be tied round the pipe with the thread which was previously put under it. The mercury is to be pressed on by the assistant with the handle of the knife, for the injector ought not to take his eye off the pipe; but he should, according to the direction of his assistant, elevate or depress the tube containing the mercury, which will regulate the force of the injection. The mouth of the vessel ought to be moistened at intervals, to prevent its getting dry, which impedes the flow of the mercury. If the lymphatic, into which we have introduced the pipe, has filled a considerable number of vessels on the thigh, the mercury is then pressed on to the glands in the groin; taking care that the foot is not too much elevated, as by that means the column of mercury would be raised higher than the vessels in the glands could bear, especially as the lymphatics there seem to be more easily burst than at any other part. We should now withdraw the pipe, and look for other lymphatics on the ankle, and proceed with them in the same manner.

These preparations are attended throughout with so much trouble, from commencement to completion, that it is of some consequence to be able to preserve them. If we endeavor to do so by merely varnishing and drying them, we shall soon see our labor defeated; for the change from the horizontal position, or a change of temperature, will, in all probability, burst the vessels. By preserving them in spirits of turpentine, we shall not only avoid the changes of temperature and destruction by insects, but add much to the beauty of the preparations.

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## MONTHLY SUMMARY OF FOREIGN MEDICAL LITERATURE.

By DR. L. ELSBERG.

36. *The most efficient Method of Removing the Placenta.* By Dr. CREDE. (Monatsschrift für Geburtskunde und Frauenkrankheiten, April, 1861.)

37. *Successful Transfusion in a Dangerous Case of Intra-Uterine Hæmorrhage.* By Dr. ED. MARTIN. (Ibid.)

38. *On a Dynamometric Attachment to the Obstetrical Forceps.* By Dr. KRISTELLER. (Transactions of the Obstetrical Society of Berlin, Monatsschrift, March, 1861.)

39. *On Thrombus of the Vulva and of the Vagina, especially after Accouchement.* By M. LABORIE. (Archives Générales de Médecine, December, 1860.)
40. *New Researches on the Nature and Treatment of Asthma.* By Dr. DUCLOS, de Tours. (Bulletin Générale de Thérapeutique Médicale et Chirurgicale, April 15, 1861.)
41. *Treatment of Lead Colic by Ice Externally.* By Dr. CONSTANTINE PAUL. (Gazette des Hôpitaux, March 30, 1861.)
42. *On the Employment of Terebinthinated Caoutchouc in the Treatment of Phthisis.* By Prof. Dr. J. HANNON. (Revue de Thérapeutique Médico-Chirurgicale, April 15, 1861.)
43. *On the Adulterations of Food, etc., in Melbourne.* By WILLIAM SIDNEY GIBBONS. (Australian Medical Journal; London Chemical News and Journal of Physical Science, April 20, 1861.)
44. *On Death from Chloroform.* By Dr. SANSOM. (Medical Times and Gazette, May 4, 1861.)

36. Having successfully practiced Credé's Method on several occasions, we can recommend it strongly. Credé insists on the removal of the placenta by uterine action alone; he restricts the introduction of the hand in the genitalia to exceptional, extremely rare and urgent cases. His method consists in excitation and increasing of uterine activity. A single energetic contraction may suffice to eliminate the after-birth; and such contractions are to be induced by friction and irritation of the fundus and body of the uterus with the hand through the abdominal covering. This manipulation must be performed at once after the birth of the child. At first the friction must be gentle; gradually we may increase it; the author says he has in innumerable cases, without a single exception, succeeded in a quarter or half hour to induce the necessary artificial contraction, even where there was previously ever so slight uterine action. When the contraction attains its maximum force, he grasps the whole uterus in such a manner that the fundus lies in the hollow of his hand, and the five fingers around the body may still exert a gentle pressure. He says he felt under his fingers the placenta leave the womb in every case; and generally this occurred with such a degree of force, that it at once protruded from the external genitalia, or at least was found lying in the lower part of the vagina. The patient suffers no other inconvenience than the increased pain accompanying the more forcible contraction, which, however, is more than compensated for, by its rendering unnecessary the introduction of the finger or hand in the parts already sore and morbidly sensitive by the previous tension and traction during labor. The womb afterwards remains well contracted; post-partum hæmorrhage is not so likely to occur; inversion can never take place with a regular contraction; while, with the usual proceeding for taking away

the after-birth, the greatest care does not preclude the possibility of its occurrence.

The author, in the very excellent article from which we have gathered the above, also gives an historical view of the various methods of removing the after-birth, and ably discusses some incidental questions and critiques.

37. On a previous occasion, (MONTHLY, Jan., 1861,) we have made our readers acquainted with Prof. Martin's views on Transfusion of Blood in Obstetrical Practice, and have carefully described his apparatus and method of operating. The number of all the cases reported now nearly amounts to sixty. In the case under consideration, a primipara, æt. 20 years, eight months gone, became extremely anæmic, in consequence of intra-uterine hæmorrhage from premature separation of the placenta. Os uteri was three-quarters of an inch in diameter, unyielding; liquor amnion gone; head quite low in the pelvis; very slight discharge of watery blood, without coagula; no sounds of fœtal heart; abdomen moderately tense, sensitive, especially at the fundus uteri, which became more and more painful, and could be felt to increase in distention; eyes sunken; skin pallid; pulse 108, small. This was at 6 o'clock, A. M.; a tampon was introduced as colpeurynter, and the attempt made to supply the place of the lost blood with bouillon, egg-nogg, &c., &c. But the stomach would not bear these, and vomiting ensued At eight o'clock, the fundus rose higher and higher; pulse became imperceptible; countenance fell; swooning ensued; temperature of body sank, and transfusion was decided on. It was performed about nine o'clock. Blood was taken from the median vein of a strong, healthy man-servant. After laying bare, by a cutaneous incision 4–5 lines long, the median vein of the right arm of the woman, the flat trocar was introduced, and the blood of the man, as it ran into a cup placed in water of about 100° F. temperature, was injected with the syringe, previously warmed with water of the same temperature, at four times, in the quantity of about six or seven ounces. The patient complained of no disagreeable sensation; some color returned to the cheeks, and uterine pains became active. On removal of the tampon, the os was found pretty well dilated. The head was in the third vertex position, and was extracted with forceps, after three-fold incision of the broad perineum. The child, a well-developed, eight months girl, was dead, as auscultation had already indicated. With the after-birth, over two pounds of black grumous coagula came away, and the placenta showed a compressed part of about two-thirds its surface, in which fresher and firmer coagula were firmly attached to its substance.

After giving for refreshment a little Champagne, a post-part. flooding ensued, which, though stopped by injections of diluted, first vinegar, and afterwards liq. ferri sesquichloridi, caused such a degree of bloodlessness, that in view of the impossibility of hematosis by food or medicine, another transfusion of three ounces into the basilic vein of the right arm was made. Gradually the patient reacted, left her bed on the fourteenth day, and has since made a perfect recovery.

Dr. Martin adds to the report of this case the account of another in which he was called on to perform transfusion, after serous effusions into the pleural cavities had already taken place. He declined operating, however, and states his conviction that transfusion offers no hope after the secondary changes, in consequence of loss of blood, and especially serous effusions in the serous cavities of the chest and skull, have already occurred.

38. The introduction of Dr. Kristeller's contrivance in the handle of the obstetrical forceps, to measure accurately the amount of tractile power exerted, we regard as a great era in the progress of obstetrics as an exact science. The mechanical arrangement itself, as yet developed and exhibited, is not free from various objections, but all these will doubtless soon be overcome by the united efforts of the inventor, and others who may experiment with his invention. The present writer intends to have it variously tested, and to lay before the readers of the Monthly the result of the investigation at the earliest possible moment.

39. The following are the principal points of M. Laboric's Mémoire:

*Thrombus vulvæ or vaginæ* supervening after childbirth is always a grave affection, as it can compromise the life of the patient; the gravity varies according to the seat and extent of the effusion of blood.

The effusion may be divided in three categories: the perineal; the epiperineal, *i. e.*, where the blood accumulates above the perineum; and the vagino-intra parietal, *i. e.*, where it occurs in the walls of the vagina. Each of these principal divisions consists of certain varieties; thus the perineal thrombus may be seated outside of the superficial aponeurosis, between it and the middle, between the middle aponeurosis and the deep-seated, etc.

The etiology of thrombus is obscure. The only predisposing cause that can be admitted must be sought in the anatomical structure of the parts of which the vascularity is remarkable, this vascularity being, of course, still increased during pregnancy. The contusing action

of the child on the parts already predisposed may be regarded as the efficient exciting cause.

The diagnosis of perineal and vagino intraparietal thrombus is easy; that of thrombus situated above the perineum is more difficult. As to the important question, Is it necessary to open these tumors, or may they be abandoned to the resources of nature, with appropriate palliative treatment, (iced compresses, etc.,)—it is stated that in most cases the incision can be deferred without injury, and may be entirely avoided in the different varieties of perineal thrombus; it is urgent, however, in epiperineal thrombus and in superficial thrombus, even, when it interferes with the functions of extra-pelvic organs.

40. Dr. Duclos believes that asthma is only a manifestation in the respiratory organs of a herpetic diathesis; that in ordinary habitual cases, the use of sublimed sulphur constitutes an effective preventive medication; and that in graver cases, those which resist the sulphur treatment, arsenical preparations constitute an excellent prophylactic.

That in nearly all cases of asthma an herpetic diathesis is found, Trousseau confirms, and it is thought that an eczema analogous to that seen on other mucous membranes, or on the skin, is developed on the pulmonary mucous membranes, causing the train of symptoms known as asthma. This may suffice as a *résumé* of his pathology. As to his treatment, he passes over the treatment of the attack, and devotes himself entirely to the preventive plan. We will quote the details in his own words: "I prescribe flowers of sulphur in the daily dose of 50 centigrammes to 1 gramme, (about 7½ grains to 15,) according to the age of the patient; to be taken at one dose in the morning, either fasting or at the time of breakfast. This treatment is continued for five or six months, during twenty days each month, or for a year or eighteen months or two years, during ten days only of each month; (*i. e.*, after the patient has regularly taken it for the said number of days, he stops taking it, then commences again daily, stops again, &c.)

"It is impossible," our author continues, "to imagine a treatment more simple or more easy. In general, the remedy is well borne by the stomach. In general, too, it produces no vomiting, no diarrhœa, no constipation, and in the very rare cases where it does exert a purgative action, the association of a very trifling quantity of opium puts an end to any bad co-effect.

"With water sulphur mixes with difficulty, on account of its tenuity and lightness. The water must therefore be added drop by drop, or the remedy be taken in a little sweetmeats of some kind, or in a spoonful of soup.

"I have obtained by this treatment results which I truly do not

hesitate to call very remarkable. * * * * Let other practitioners now make observations; let other practitioners now make experiments; but let them be sure that they make them in the conditions of veritable, legitimate asthma, and not of dyspnœa, connected with organic affection of the heart, great vessels, or lungs. Their researches will, I dare hope, only confirm the statements as to pathology, as well as therapeutics, which I have made in this Mémoire."

41. Quite a number of cases are detailed in which the application of a bladder filled with ice to the umbilical region, continued for two hours, and in one case as long as four hours, was followed by great relief from pain and spontaneous passages from the bowels; when in some cases, in spite of various means of medication, no operation had been had for three, four, five and six days. In some cases, in which it was tried before any other remedy, none other was necessary; passages followed within twenty-four hours. The treatment by ice to the abdomen is by no means insisted on as *the one remedy*, to the exclusion of all others, but it is ably advocated by the author, as a precious means of relief from much pain, distress and suffering, and as an extremely useful adjuvant to other means of treatment. [Though by no means new in itself, we heartily recommend employment of Dr. Paul's treatment in such and similar cases.]

42. Pure caoutchouc, cut in very thin and very narrow slices, is thrown in essential oil of turpentine, one part of caoutchouc to two parts of the oil. It is allowed to macerate. Gradually it swells, becomes impregnated with turpentine, the slices approach, reunite, and finally disappear, dissolved in the oil; the solution thus obtained is brown, and of a syrupy consistence. It is then made into an electuary with syrup of elder and a few drops of essential oil of bitter almonds. The dose, says Dr. Hannon, is four tea-spoonsful of electuary a day; an ounce of which may contain about fifteen grains of the terebinthinated caoutchouc. Two spoonsful are given in the forenoon, and two in the afternoon, with an interval of two hours between each. "The dose may be gradually increased, as the stomach can bear, and the patient gets accustomed to the taste and smell of the turpentine, to a drachm, or even a drachm and a half, of the terebinthinated caoutchouc. This administration must be continued daily, till the symptoms of pulmonary phthisis disappear; and I do not abandon it even then entirely, but simply decrease the dose."

Caoutchouc administered in the solid state is inert; it is not digested; it traverses the intestinal canal without alteration; but after "disagregation," by means of the turpentine, it is easily digested, and

seems to favor hematosis considerably. Chemically, no *respiratory food* can be richer in carbon and hydrogen than pure caoutchouc, which consists of only these elements.

Given to phthisical patients, "under the influence of terebinthinated caoutchouc, expectoration diminishes rapidly; oppression ceases; night-sweats disappear; diarrhœa and fever stop; gradually strength reappears, and emaciation gives way to *embonpoint*. The cough is one of the first symptoms, too, which disappears.

"No other appropriate treatment need be excluded, while giving the caoutchouc, but it is indispensable to give the latter through the whole continuance of treatment. That the cure of phthisis is not beyond the power of nature, very numerous examples prove; and that the terebinthinated caoutchouc, combined with other remedies, will assist in bringing about such a result, many observations lead me to believe." Dr. Hannon refers to about a dozen cases.

43. We think the following article of sufficient interest to deserve a place here:

*Flour.*—I find in my note-book a record bearing date November, 1856, of the examination of several samples of flour at one time. They were eight in number; and of the eight, four were notably adulterated with plaster-of-Paris. Many cases occurred about the same time of the seizure of flour, which, after examination, was condemned as unfit for sale, the venders being punished whenever the act could be brought home to them. Most of the flour so condemned was musty, or otherwise deteriorated by organic change. About the same time a somewhat singular circumstance occurred, which is worthy of mention in this connection. I had been lecturing in a suburb, not then famous for the production of good bread, on the chemistry of bread. After discussing the various phenomena connected with nutrition, with bread-making, &c., I proceeded to illustrate the most familiar adulterations by actual experiment, and by the citation of cases. When I concluded, some local bakers, virtue impelled, rose to say a few words for the credit of the craft. One had been in the trade for twenty-seven years, and had never heard of alum; another was all innocence on the subject of potatoes; and a third was horrified by the bare mention of plaster. I was about to disclaim all personal allusion, as I did not know at which of their shops my sample had been bought, when a gentleman in the body of the crowd rose, and having premised that he was unconnected with the "mystery," told the following pertinent anecdote without comment: "He had imported a cargo of whitening, an article in great demand among the makers of

effervescing draughts, but unfortunately for him his shipment arrived in cold weather, and was stored at a cost almost beyond its then value. There it remained for some time, 'eating its head off' in the store, for there was no hope of a rise until next spring; when one day, to his surprise and delight, the broker in whose hands it was placed called and reported the profitable sale of the lot. 'What on earth occasions the demand at this season?' inquired the delighted vender. 'Flour's up,' was the laconic reply."

*Bread.*—Although I am willing to believe that bread is less injuriously, and less extensively doctored here than in London, it is often far from being what it professes. Damaged flour and deteriorated grain are certainly sold specially for the behoof of fowls and pigs, and contribute their share to the prevalent diseases among the former, but they nevertheless often find their way to the table. I have lately had some samples of bread under examination for fungi; but although I could have taken a hint from the oft-quoted Dauphine, and have eaten pastry, rather than such bread, I was not sufficiently satisfied of their presence to feel justified in condemning it; as while the conditions for the growth of fungi subsisted, the plants themselves were not to be found. I have already made mention of potatoes as a common, I may say, a general adulteration of bread, not in the form of potato-flour or starch, but entire or simple boiled mashed potatoes. The fraud here is the substitution of a less for a more nutritive article, and one too that holds a larger quantity of water. The same objections, with others on which it is needless to enter, apply to the use of rice.

*Spirits.*—To the liquors sold in Melbourne I have had opportunity of giving special attention, and I have notes, the publication of which, with names and addresses, would probably astonish the persons to whom they refer. It must not be supposed that liquors sold over bars are the same as those delivered into cellars, or from bonded stores. Such little trifles as water, salt, alum, burnt sugar, frequently enter into the composition of the nobbler, and one or other may almost always be found. Were it otherwise, there would probably be a much larger amount of drunkenness produced with the expenditure of smaller sums of money. People could get "wholesomely" drunk too soon upon spirits of the full strength, and the most profitable kind of trade, viz., tippling, would run a risk of being curtailed; while if the diluent alone were added—and I believe that this may be the only addition in some few of the best houses—the reduction could not be carried to so great an extent as is common. To take an example, one of many, over the bar of a house that shall be nameless, one of a class,

a spirit (rum) was sold, which was within a fraction of forty degrees of proof below an average sample obtained from a respectable wine merchant, and employed as a standard for comparison. The solid constituents were very little reduced, and the extractive matter, including the gum, sugar, &c., was but little less. How then had the change been effected? The strength had been brought down by water, the color, and part of the flavor restored by burnt sugar, and other, perhaps less agreeable, organic matters, and the roughness which might tickle unrefined palates was imparted by alum, the constituents of which were present in larger quantities than could have been attributable to the water. In the matter of brandy, less consumed, perhaps, by the class of customers thus played upon, I found less doctoring of the sort described. Brandy is even more exposed to doctoring than rum, but to do it well requires rather more nicety, and the ingredients are not of the same rough-and-ready kind. In the series of experiments to which I refer, I find a brandy fifty-three degrees below the assumed standard. In this instance there had not been any addition of alum or other mineral astringent; probably the water was almost the only adulteration, the use of some highly concentrated astringent, such as catechu, being alone admissible under the circumstances. Neither capsicum nor tobacco were found, nor had any mineral acids or metallic salts, except common salt and alum, been added to any of the spirits examined. The advance in price was the same as in the former case cited, but the bulk was doubled, so that the profit bordered on the fabulous.

*Beers.*—In the beers it was more difficult to discriminate between the work of the English and the colonial brewer, and to determine the publican's part in the doctoring. I believe, however, that his share is limited to collecting all the drains of the counter, and the other beer-engine waste flow, into a butt, whence it returns in combination with original beverages, and to drawing from two butts. The latter operation has place more particularly with ale; the pipe going down from the engine is branched, one end going into the English brand, to whose name it answers, and the other into some colonial abomination; or, perhaps, into the *omnium* before mentioned, though the chief use of that is, no doubt, for the ready production of half-and-half.

*Confectionery* in its most artificialized forms is a fruitful source of disease; and well it may be. The most noxious types of those really intended for eating (though many ornamental devices not addressed to the palate yet find their way into the stomachs of children) are the comfits of dead white, body colored externally. In some of these I found the following coloring matters: the red was a harmless organic

pigment, one of the lakes commonly used; the yellow was the poisonous chromate of lead, and formed a thick coating on the surfaces of some of them, while in others the pigment was diffused; the same deadly paint was used in combination with the red to produce orange; the blue was ultramarine, and the same pigment faced with red furnished a purple. The white opaque mask, though uninviting enough, was nearly all sugar, and did not contain any plaster-of-Paris or other earthy matter.

*Coffee.*—Perhaps the most remarkable example of local adulteration and sophistication is coffee. I long regarded it as the sole case of the kind that demanded notice. The question "What is coffee?" should now have for its reply, "Coffee is a manufactured article, varying according to the products of the country in which it is made; in Melbourne it consists in part of the berry whose name it bears, and in great part of gram, maize, peas, roasted corn or potatoes, and chicory." The case of coffee is a very singular example of the gradual perversion of public taste, by means of gradually increasing adulteration. Formerly, in England, coffee in its purity was a staple commodity; its flavor was well known, and was highly esteemed. Presently chicory was introduced with specious and false recommendations as an improver, an economizer, &c.; then those grocers who had before used it increased the proportion to keep pace with the times, and before long the coffee with an admixture of chicory, might be called chicory with an admixture of coffee. The chicory then became a mixture, as it is now, and the diluted ingredient required a disguise in the shape of color; and the coffee mixed with mixtures became a very indefinite compound, and needed all sorts of sophistication to correct flavor and color. At this point, then, when coffee is merely a subordinate ingredient in the compound, begins the history of our adulterations, and the Melbourne manufacturer avails himself of the state of the public palate to acclimatize the usages of the London market. The state of the markets dictated whether maize, or gram, or peas, or potatoes should be the staple, and they were flavored and colored with chicory, enough coffee being added to tone the whole, to impart a modicum of their essential qualities which are possessed by coffee alone of all the ingredients, and to satisfy what served the artist in place of a conscience.

A few words in conclusion. Without intending to defend the traders who either adulterate or sophisticate our food, I must distinctly throw the blame upon the consumer, who is the cause. No one who goes out of his way to a cutting shop, or who endeavors to purchase an article at a less sum than it can remuneratively be produced for, has any

right to complain of adulteration, nor is he entitled to raise a cry against sophistication, if he insist on an ideal standard of color or texture. A manufacturer of genuine mustard, then almost the only one, tried for years to get his mustard into the English market, but was always at a disadvantage. It was of a dingy-brown color, whereas the sapient public would not be content with anything but bright yellow. Of course, said public was accommodated by the help of starch and turmeric. And so it will be with everything else. If people set their minds on having coffee at ninepence a pound instead of eighteenpence, grocers would be found to supply the article.

44. The author considered that, at the highest estimate, the number of deaths from chloroform to the number of inhalations bore the proportion of one to ten thousand. Various considerations, however, concurred to show that this should be very much more favorable. In the first place, it was very probable that several of the deaths were from shock or fright, and not from chloroform; and in furtherance of this view was the fact that half of the number of deaths occurred before the commencement of the operation for which chloroform was administered. Another avoidable circumstance increasing the death-rate was supposed to be carelessness and laxity in the administration of the vapor. Circumstantial records of thirty-four cases of death which have occurred since the publication of Dr. Snow's work were presented: the author combined them with those recorded in that volume, and offered an analysis of their most salient points. In cases of death the proportion of males and females is about two to one; and this seemed to the author strange, since the anæsthetic is so largely used in midwifery. The average age for death is thirty to forty. It certainly seems that the strong and healthy stand a worse chance than the debilitated; but of all states of the system, chronic or acute, alcoholism the most predisposes to death. Extensive disease of the lung occasionally disposes to death from asphyxia; disease of the heart probably does not influence the mortality. Dr. Sansom strongly deprecated the administration of chloroform sprinkled on handkerchiefs, etc., basing this not only on the observed fact that a highly-charged atmosphere (5 per cent. Snow, 8 per cent. Lallemand, Perrin, and Duroy,) was fatal to animals, but on the circumstance that of all the cases which he had collected, only two were mentioned as occurring wherein a proper inhaler had been used. Of fifty-one cases, thirty-eight declared their danger by sudden stoppage of the pulse. Five deaths occurred in which there was manifested great muscular excitement, collapse immediately following; these were all strong men, in their prime.

Sudden vomiting and then death occurred twice; congestion of the face was the most marked sign in six, and cessation of breathing in eight cases. Dr. Sansom considered that death occurs both by asphyxia and by syncope—in animals by palsy of respiration, the heart being "ultimum moriens;" in man occasionally from this cause, but more frequently from palsy of the heart, the respiration outliving it. In animals a constant sign on post-mortem examination is distention of the right chambers of the heart; in man this is a frequent, but still far from a constant sign. Fluidity of the blood and a dark color thereof occur almost invariably. The following were the author's conclusions: In animals death occurs by asphyxia, and begins in the brain. In man death occurs by asphyxia or syncope, and begins in the brain, in the heart, or in the lungs. Artificial respiration is the only reliable means for restoration in critical cases. Galvanism of the phrenic is valuable where the means are at hand. Before anything is done the tongue should be well drawn forward, and the mouth and throat cleared from mucus.

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## REVIEWS AND BIBLIOGRAPHY.

*Researches upon the Venom of the Rattlesnake, with an Investigation of the Anatomy and Physiology of the Organs Concerned.* By S. Weir Mitchell, M.D., Lecturer on Physiology in the Philadelphia Medical Association. Published by the Smithsonian Institution, Washington City, 1861. Quarto, pp. 145.

*On the Treatment of Rattlesnake Bites, with Experimental Criticisms upon the Various Remedies now in Use.* By S. Weir Mitchell, M.D., &c. (Extracted from the North American Medico-Chirurgical Review for March, 1861.) Phila. Octavo, pp. 45.

The contributions of Dr. Mitchell are deserving of special notice at our hands, on account of their intrinsic value, and as exhibiting the laborious researches a physician may prosecute while in attendance upon the humdrum routine of daily practice. Our profession too often resign themselves to the idea that no time is at their command for study and private research, and, in a few years after the attainment of the diploma, contentedly lay aside all aspirations for improvement, falling into an empirical method of treating disease according to nosology, and avoiding everything like study. Now it is difficult to define what will be or what will not be of practical value to the medical man, since every new discovery in physics, chemistry, physiology, &c.,

&c., may have some influence on the science or art of medicine; and hence whatever particular bent his mind may have by following that during his hours of leisure, (and it is really singular how *many* hours of leisure the busiest men have!) he may accomplish something for the good of his profession. Researches of the character of those undertaken by Dr. Mitchell serve to clear up errors in physiology; to show our ignorance, which is always the first step towards knowledge, and to enlarge our sphere of knowledge. That these results are inevitable, every one will admit; and hence our surprise (almost approximating disgust) when we learned that Dr. Mitchell's paper, which is now published by the Smithsonian Institution, was rejected by the Committee on Prize Essays of the American Medical Association, *because* it "gives so little prominence to the strictly medical portion of the subject, that it hardly merits a place in the Transactions of this Association." We congratulate Dr. M. that he escaped an interment of his paper in "*the big book;*" and we congratulate the Smithsonian on placing among their quarto publications one so likely to be of decided service to medical and scientific men, and such a real "contribution to knowledge."

The crotalus has occupied attention for years, on account of its peculiar venomous character, and the numerous antidotes which have been from time to time lauded as infallible in the cure of those bitten by it. But notwithstanding this general attention, there has been very little scientific study of the subject. Dr. M. gives us the anatomy of the venom apparatus at full length. We regret that we are prevented from transferring this portion of the paper, as it would hardly be intelligible without the aid of the very superior illustrations accompanying the description. A few sentences may, however, be of interest to those of the profession who have no access to the paper.

"The heads of the true serpents are so constructed as to admit of a large amount of movement in the component parts. Thus, the zygomatic bones which support the lower maxillary bones are loosely articulated to the mastoid bone, which is itself so mobile as to permit of the greatest possible expansion of the throat. Anteriorly, the superior maxillary bones are united by ligaments only to the intermaxillaries; and the lower maxillary bones of each side are also so connected anteriorly as to permit of their being widely separated, and of one or the other side of the inferior jaw being drawn down to some distance without involving a corresponding motion on the part of its fellow. Finally, the superior maxillary bones, the pterygoid and palate bones, admit of considerable movement, so that the arches which they form can be widened or narrowed as circumstances may require. The mobility of these parts is essential to the motions which raise and

depress the fang, and to the deglutition of the large animals upon which the snakes are accustomed to prey."

"The poison-fang, when at rest, projects downward and backward into the mouth of the serpent. It is firmly anchylosed in the alveolar process, which crowns the shortened upper maxillary bone, whose peculiar brevity is characteristic of venomous snakes. * * The poison-gland occupies the side of the head, behind the eye, and beneath the anterior temporal muscle. * * The general form of the gland is that of a flattened, almond-shaped oval, the posterior end being somewhat obtuse, and the anterior tapering to the duct, which begins just behind and below the eyeball. * * The length of the organ from the insertion of the articular ligament to the beginning of the duct was found to be eight-tenths of an inch, in a snake which was four feet long, and weighed two pounds and two ounces. Its breadth was nearly two-tenths of an inch, its thickness about one-eighth to one-tenth of an inch."

But by an examination of a number of snakes, no decided relation could be made out between either size or weight of the gland and the size or weight of the snake.

There is no reservoir of the venom secreted by this gland; the venom is stored away simply in the duct and its enlargement within the gland.

"The duct expands somewhat suddenly as it enters the gland, and being directed backward and a little upward, forms an irregularly-rounded cavity, which runs nearly the whole length of the gland. Into this receptacle the smaller ducts of the gland empty their contents. From the sides of this cavity there run, obliquely upward and a little backward, from five to eight layers of white fibrous tissue, which, lying transversely to the long axis of the gland, separate its secreting portion into lobes, which narrow as they approach the central cavity. The septa here described are finally lost in the capsule of the gland. On their passage outward, they send off numerous branches and thin sheets of tissue, which proceed upward, for the most part, but also across the lobes, and thus involve the secernent structure in a supporting scaffolding of the firmest possible character. The gland, so constructed, resembles very strikingly, in section, the appearance of a small testicle. * * The intimate structure resembles very closely that of the typical salivary glands."

The structure of the fang, a subject of intense interest to the student of this subject, is thus given from Owen, having been verified by our author:

"To give an idea of the structure of this tooth, we may suppose a simple slender tooth, like that of a boa constrictor, to be flattened, and its edges then bent towards each other, and soldered together, so as to form a tube, open at both ends, and inclosing the end of the poison-duct. The duct which conveys the poison, although it runs

through the centre of the tooth, is really on the outside of the tooth The bending of the dentine beyond it begins a little beyond the base of the tooth, where the poison-duct rests in a slight groove, or longitudinal indentation, on the convex side of the fang; as it proceeds, it sinks deeper into the substance of the tooth, and the sides of the groove meet and coalesce, so that the trace of the inflected fold ceases, in some species, to be perceptible to the naked eye, and the fang appears, as it is commonly described to be, perforated by the duct of the poison-gland."

When a fang is shed, it is replaced in a very short time; when extracted by violence, some weeks are required. Dr. Johnston, of Baltimore, has shown that the secondary fangs have separate capsules, located in the mucous membrane, at the bottom of the functioning fang. When the latter has been shed or violently displaced, the reserve tooth is pushed forward into a recess "adjacent to and on the *inner side* of the fang."

The animal has entire control of the fang, which is really obedient to volition; and the force with which the poison is thrown from it depends to a great extent upon the amount contained within the gland. A case is mentioned where it was thrown some five or six feet. As much of the venom may be cast over the skin when an animal is bitten, it may frequently happen that a sufficient quantity does not enter the puncture made to act seriously on life. In such cases almost any treatment would be followed by apparent success, and the articles employed would be ignorantly considered as antidotes.

The chapter on "The Physical and Chemical Characters of the Venom" is quite interesting. The largest amount ever collected from one fang by Dr. M. was fifteen drops. Its color varies from a straw yellow to an emerald green. It is tasteless and inodorous; reaction uniformly acid, while that of the mucous membrane of the mouth was alkaline. Prof. Hammond succeeded in obtaining crystals, by allowing a dilute mixture of the venom to dry under a cover-glass, resembling triple phosphate, and which may be called crotaline. The result of the chemical examination shows that the venom consists of albuminoid substances, some of which are coagulable at 212°, and others (*crotaline*) not coagulable at that temperature, a coloring matter, a trace of fatty substance, with some chlorides and phosphates. The most protracted boiling does not appear to exercise any effect on the virulence of the venom.

The fifth, sixth, and seventh chapters of Dr. M's Smithsonian paper are devoted to the toxicology of the venom, with its action on vegetable organisms, the lower order of animals, and upon the tissues and fluids of warm-blooded animals. The eighth chapter is devoted to a

consideration of *crotalus poisoning* in man, sixteen cases of which, with all the facts recorded concerning them, are tabulated by the author. The local symptoms produced by the bite of a snake are pain, followed by swelling, discoloration, &c. "The swelling is due, not to inflammation, but to a large or small collection of effused blood about the wound." In the cases reported, however, a ligature was applied, and this may have exerted some influence on the production of these local symptoms; although, where a ligature has not been applied as in animals, swelling also occurs but very slowly. These symptoms, however, increase: the swelling and discoloration extend up the limb; the colon of the surface is that of an old bruise; vesication may occur, and gangrene be established in the part. The *constitutional* effects set in easily; within a very few minutes there is terrible prostration of all the vital energy, with all the regular accompaniments of such depression; cold sweats, nausea and vomiting; quick, feeble pulse; anxious expression and disturbed mind. If death does not result speedily from these constitutional effects, then the local symptoms become of prime importance. "The signs of blood-poisoning develop themselves, and within a few hours, or a day, the face and other parts become swollen and puffy. At the same time the general weakness remains well-marked, as shown by repeated syncope, the heart quick, feeble and fluttering, and the respiration labored. In the majority of cases, the slight mental disturbance now passes away, and the mind remains singularly clear to the close, whatever the event may be." The duration of the case, before death brings relief, seems to vary. In the sixteen cases given by Dr. M., four proved fatal; death taking place in five and a half hours, nine hours, eighteen hours, and seventeen days respectively.

Dr. Mitchell's second paper, which considers the treatment of rattlesnake bites, is almost practical enough to attract the attention of the Prize Committee of the American Medical Association. It discusses the fallacies which have arisen from ignorance as to the secretion of the poison, and the mode in which the fang is employed and the venom ejected. Every bite is not necessarily poisonous. Not only may the amount of venom be insufficient, but the fangs not being elevated "sufficiently when striking, the fang-points touching the skin may be driven backward towards their usual position of repose without penetrating the part aimed at; the wound inflicted is occasioned by the teeth of the lower jaw; only one fang may penetrate," &c. In such cases, almost any treatment being successful would receive the credit of being thoroughly and reliably antidotal.

As seven-eighths of the persons reported as bitten by rattlesnakes have recovered, with treatment almost as different as the ingenuity of man could make it, evidently ignorance is general as to the *nature* of the disease produced by the venom, and fallacies must arise also from this cause.

An antidote does not necessarily imply chemical influence on a poison, although this is the true nature of such when used for most mineral poisons. Anything that will counteract the effects of a poison is rationally entitled to the name of antidote. It would require a large volume to narrate the articles which have, from time to time, claimed attention as antidotes for crotalus bites. The old *post hoc* doctrine seems to be the basis on which the deductions as to *propter hoc* have been made. Dr. Mitchell very carefully analyzes the different methods of treatment proposed by prominent physiologists and members of the medical profession, and closes his paper by his own plan of treatment, which we lay before our readers, as of decided practical value.

"When called to a patient who has been bitten by a rattlesnake, the physician should at once ligate the limb with a *broad* band, as tightly as may be needed to check the circulation, while, wherever it is possible, cups should be also used immediately over the wound. The question of immediate excision or ablation of the part will be then determined by considerations already given." (The author thinks that ablation might be of use, if done early; and that *incision*, when used at all, should be employed so as to lay open the fang-wounds, which are then to be exhausted by suction, cups, &c.) Injections of iodine dissolved in iodide of potassium solution may then be made, with the view of limiting the local disease, and the actual cautery may even be applied. "Meanwhile, *stimulus* in some shape should be given; and when the excitement thus obtained is sufficient, the finger should be laid on the pulse and the band loosened. As the system becomes depressed, the ligature is once more to be drawn tighter, and, with continued use of stimulus, the economy prepared for another dose of the venom, which is thus to be antagonized little by little. Finally, it will be requisite to shift the band higher up the limb, to avoid the too great constriction of the damaged member. The further management of the case, with regard to stimulus, must be left to the physician, who will remember that, in most cases of severe poisoning, he has to deal finally with a blood which has lost a part of the whole of its power to coagulate. He may find in the mineral acids, tonics, as quinine, and the continued use of stimulus, the necessary means of carrying his patient through the later stages of the malady."

Prof. Hammond, of the University of Maryland, employed with good results Bibron's antidote, which it is proper we should give beore closing this article. ℞.—Potassii iodid., grs. iv.; Hydrargyri

chlorid corrosiv., grs. ij.; Bromini, 3v. M. Ten drops of this mixture, diluted with a table-spoonful or two of wine and brandy, constitute a dose, to be repeated if necessary. Dr. Mitchell's trial of the antidote was not marked with success, and he considers that its properties are as yet not sufficiently proven.

In closing our notice of Dr. M's researches, we have but to express our admiration at the care and intelligent faithfulness with which he has explored this *terra incognita*. Papers like these are an honor to the profession, as well as to their authors. L. H. S.

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*A Manual of Military Surgery; or, Hints on the Emergencies of Field, Camp, and Hospital Practice.* Illustrated with Wood-Cuts. By S. D. Gross, M.D., Prof. of Surgery in the Jefferson Medical College. Philadelphia: J. B. Lippincott & Co. 1861.

The substance of this little work of 186 pages, small 12mo, was, we are informed in the preface, originally intended as an article for the medical journal of which the author is an editor. It is now published in the present form for the benefit of the young physicians who are hurrying to do volunteer service in the army of their country.

It is divided into thirteen chapters, a mere outline of which we give, that our readers may know the character of the work, and its appropriateness for the present unfortunate emergency.

Chapter I—Historical Sketch of Military Surgery, giving the titles of the best and most recent works on Military Surgery. The latest works are: "Notes on the Surgery of the War in the Crimea, with Remarks on the Treatment of Gunshot Wounds," by Dr. George H. B. Macleod, now Prof. of Surgery at Glasgow; a work by Dr. Lewis Stromeyer, Physician of the Royal Hanoverian Army, issued in 1858, in two volumes, and entitled "Maximen der Kriegsheilkunst," to which a Supplement was added in the early part of the present year; a work by Sir George Ballingall, a fourth edition of which appeared recently in Edinburgh. This has for its title, "Outlines of Military Surgery," and is regarded as one of the best works on the subject in the English language.

The works of Guthrie have always been held as among the most valuable, and we have heard it stated by military surgeons that the lectures on Military Surgery which appeared in the *Lancet* in 1854 were the most concise and practical works on the subject to be found. Dr. Gross also recommends for the use of army medical officers the volume

entitled "Hints on the Medical Examination of Recruits for the Army," by the late Dr. Thomas Henderson, a new edition of which was published a few years ago by Dr. Richard H. Coolidge, U. S. A.

Chapter II—Importance of Military Surgery.

Chapter III—Qualifications and Duties of Military Surgeons. In this chapter the author recommends that each regimental surgeon should have two assistants in time of peace, and at least double that number in time of an engagement. We think the latter number is not enough, and that the experience and practice of foreign armies is in favor of a greater number when in active service.

Chapter IV—Medical Equipments, Stores and Hospitals: Giving an account of the means and appliances of conveying the wounded and disabled from the field, of ambulances, medical stores, instruments, apparatus, of nurses, and their duties.

Chapter V—Wounds and other Injuries. Treating briefly of fractures, dislocations, bruises, sprains, burns, and wounds, whether punctured, lacerated, or gunshot.

Chapter VI—Amputations and Resections, confined to the peculiarities demanded by military practice.

Chapter VII—Ill Consequences of Wounds and Operations; such as traumatic fever, hæmorrhage, excessive suppuration, spasm, erysipelas, gangrene, pyæmia, and tetanus.

Chapter VIII—Injuries of the Head, Chest, and Abdomen. This chapter treats of concussion and compression of the brain, of gunshot injuries of the skull, of wounds of the brain, scalp wounds, wounds of the face, chest, and abdomen.

Chapter IX—Diseases Incident to Troops.

The bullet is not near so fatal to an army as disease. The carefully-prepared statistics of foreign governments upon this point are reassuring to the soldier, and show him how much depends upon himself, in this question of mortality. Even at this day, with all the improvements in fire-arms, and the wonderfully increased efficacy of the means of warfare, it is not the killed and wounded which disable an army, but rather disease. "The diseases which attend armies or molest soldiers in camps, garrisons and hospitals, and which so often decimate their ranks, and even at times almost annihilate whole regiments, are the different kind of fevers; especially typhus, typhoid, dysentery, diarrhœa, and scurvy." In the Crimea, the British army lost over 33,000 out of 94,000 engaged; of these, only 2,658 were killed in action; 1,761 died of wounds; while of the rest, over 16,000 died of disease, and 13,000 were sent home on account of sickness. Of the French army, 7,500

died in action, or from wounds received; 50,000 from disease, and 65,000 were sent home for sickness.

In the late war with Mexico, our own army met with the loss of ten men from disease, to one in battle or from wounds. About 1,500 only were killed in battle and died from wounds, while nearly 15,000 died from disease, and over 10,000 were discharged on account of sickness.

The disease incident to troops becomes, then, a most important study; and the offices of a physician are next in importance to the commander-in-chief.

Chapter X—Military Hygiene. The prevention of disease in a body of men such as constitutes an army is one of the most important duties of a medical officer. The suggestions this chapter furnishes are most valuable.

The remaining chapters are upon the following subjects: Chapter XI—Disqualifying Diseases; Chapter XII—Feigned Diseases; Chapter XIII—Medical, Surgical, and Dietetic Formulæ.

This little book, which can easily be carried in the pocket or knapsack, presents, in a very few suggestive words, much valuable information to all who are just entering the military service of the country, and particularly to the younger members of the profession, to whom most of the duties will be new. It is a timely and valuable volume.

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*A Treatise on Human Physiology: designed for the use of Students and Practitioners of Medicine.* By JOHN C. DALTON, JR., M.D., &c., &c. Second Edition, revised and enlarged, with 271 illustrations. Philadelphia: Blanchard & Lea.

The first edition of this work appeared in 1859; a review of it was given in the MONTHLY, for May, of the same year. Within two years, a second edition has been called for, and the author, in preparing it, has not been contented with sending out a stereotype copy of the former edition, but has most industriously revised the whole work, adding several complete chapters, and essentially modifying others.

The principal additions and alterations which the author states he has found advisable are:

"First, the introduction of an entire chapter devoted to the consideration of the *Special Senses*, which were only incidentally treated of in the former edition. Second, the rearrangement of the chapter on the *Cranial Nerves*, and the introduction of some new views and facts in regard to their physiology. Third, an account of some new experiments, original with the author, relating to the functions of the *Cerebellum*, and the conclusions to which they lead. Fourth, certain con-

siderations respecting the general properties of *Sensation* and *Motion* as resident in the nervous system, which are important as an introduction to the more detailed study of these functions. Fifth, the introduction of a chapter on *Imbibition* and *Exhalation* and the functions of the *Lymphatic System*, including the study of endosmosis and exosmosis, and their mode of action in the animal frame; the experiments of Dutrochet, Chevreuil, Gosselin, Matteucci, and others, on this subject; the constitution and circulation of the lymph and chyle; and finally, a quantitative estimate of the entire processes of exudation and reabsorption, as taking place in the living body.

"Additions have also been made to the chapters on Secretion, Excretion, the Circulation and the Functions of the Digestive Apparatus."

Our opinion as to the matter contained in this volume, and the manner of its utterance, is generally the same as that expressed in the review already mentioned. The views then held of the first edition are confirmed by the additions, which supply, in a great measure, the deficiencies we then noted in the work. There seemed to us to be something wanting in the first edition, in the division on the nervous system, to bring that part as well up to the state of physiological science as were the other divisions. These deficiencies are in a great measure supplied by the chapter on the Special Senses, the new views in relation to the physiology of the cranial nerves, and the author's original experiments in relation to the functions of the cerebellum. The clear, simple, elegant style of the author, gives an additional attractiveness to the subject. It is hardly necessary for us to add, that we hope a speedy call for a third edition will show the appreciation of our profession for the labors of the author.

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*A Hand-Book of Hospital Practice; or, an Introduction to the Practical Study of Medicine at the Bedside.* By ROBERT D. LYONS, Prof., etc., of Dublin. New York: Samuel S. & William Wood, 389 Broadway. 1861. 8vo, pp. 185, (and 48 ruled pages, presenting model forms for reporting cases.)

Few persons, if any, have ever become skillful, self-reliant, and successful practitioners in medicine and surgery, who have not closely watched and recorded the phenomena of disease at the bedside during their student-days in hospital. All medical experience and authority are unanimous that clinical or bedside study in a hospital is indispensable to the formation of a sound and safe practitioner; yet this truth, though now trite and common-place in all mouths, is still barren of at least half which it practically imports. For clinical or bedside study

implies something more than the half-curious, half-listless manner of reconnoitring, *à la distance*, a striking injury or unusual disease too often witnessed on the part of some students.

One of the greatest impediments to the student's progress is unquestionably the want of some methodical plan upon which to pursue his observations and inquiries at the bedside from the outset. It has therefore occurred to me, that it would be an invaluable acquisition to the student if a simple, methodized plan of clinical observation could be framed and combined in some convenient form, with brief but explicit instructions as to the best mode of procedure for investigating any given case, arriving at a diagnosis, and recording its history, symptoms, treatment, daily progress, and termination. I also conceived that if, at the same time, it contained in condensed, yet intelligible and readily accessible form, a compendium of the preliminary knowledge most essential for rightly interpreting and using the information thus acquired and recorded by the student, it would be of infinite service, by preparing him to profit by the more advanced teachings of the clinical physicians and surgeons, much of which is now lost to the junior students especially, by reason of their not having the necessary preliminary information.

These passages, slightly modified from the author's introduction, together with the title, entirely explain the scope and purpose of the work before us. Of its execution, we can, after a careful examination, speak favorably; and cordially, therefore, add our voice to that of the entire British press in recommending it to students and others desiring such a hand-book.

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**TRANSLATED FROM THE FRENCH, EXPRESSLY FOR THE MONTHLY.**

*Lectures on Diphtheria. (Egyptian Disease.) Delivered at L'Hôtel Dieu, Paris.* By M. TROUSSEAU.

(Translated by the Editor from La Clinique Médicale de L'Hôtel Dieu, of M. Trousseau.)

(Continued from page 396.)

### *Malignant Diphtheria.*

Much more terrible than the preceding Form—The Local Affection is nothing compared to the General Condition—It Destroys, not like Croup, by Asphyxiating through repeated Attacks of Suffocation, but in the same way as Septic Diseases, by a General Poisoning—Considerable Ganglionary Engorgements—Erysipelatous Redness—Coryza and Nasal Diphtheria—Diphtheritic Ophthalmia—Epistaxis—Hæmorrhages of all kinds—Anæmia.

GENTLEMEN—In the preceding lecture, I spoke to you of that form of diphtheria which can be called normal; of that form which,

commencing in the pharynx with the characteristics I have indicated to you, extends into the larynx, trachea and bronchi, and produces death by asphyxia. This is the most ordinary form, the form it takes on when sporadic; that which it almost exclusively assumes in certain epidemics, the most common even when malignant diphtheria prevails, of which I am now about to speak. In fact, in a family where four, five, or six persons are attacked with this disease, croup would be the general rule; the malignant form, that which carries off the sick by poisoning them like septic diseases, is the exception.

Many patients have exhibited it to us during the last few years, and among others, a little girl in whom you have been able to observe the progress of the disease, step by step, until its fatal termination.

This was a child twelve years old, who came one evening to the Hôtel Dieu, and was admitted into the wards of my colleague, Prof. Jobert, (de Lamballe,) who sent her to me. She had been taken sick only three or four days before, with a sore throat so slight, and accompanied with so little febrile action, that she did not complain, and her parents did not pay any attention to it. The difficulty, however, increasing, and an engorgement of the glands of the neck having become very manifest, she was brought to the hospital, and was sent to the surgical clinic. The nature of the disease was instantly recognized, and she was brought into our ward St. Bernard.

At our first visit, we were struck, upon examining the mouth, with the horrible gangrenous odor of the breath; we found the veil of the palate pushed strongly aside to the right, precisely as it is in those who are affected with phlegmonous angina of one side; we discovered upon this membranous veil a whitish exudation very clearly defined at its edges, and festooned upon its superior part towards the roof of the palate. This diphtheritic exudation extended over the pillar of the palate, and became lost in a kind of grayish putrilaginous mass, which covered the back of the throat, from which exuded a grayish sanious fluid of a powerfully offensive odor. Upon the right of the uvula, crowded completely to the left, on account of the tumefaction of the diseased parts, we saw a whitish concretion; the left side was intact, as well as the tonsil of that side; we also perceived one or two yellowish-white spots upon the posterior part of the pharynx. The nostrils were perfectly healthy. The tumefaction of the lymphatic ganglions of the angle of the jaw, and of the submaxillary ganglions, was considerable upon the right side. This tumefaction was also very painful. Nothing particular upon the left side.

We immediately decided that we had before us a case of pharyngeal diphtheria of a malignant form, one of the most terrible diseases, which never yields its hold unless combated by the most energetic measures, and which even then resists all our efforts in a very great number of instances. I then gave an unfavorable prognosis; for although the nose was not yet attacked, in which case I should from the first have lost all hope, the great engorgement of the cervical and submaxillary glands appeared to me to augur most unfavorably.

I immediately commenced the only treatment which offered me any

chance of success I cauterized vigorously the diseased parts with a solution of nitrate of silver, 50 grains to the ounce; then I blew powdered alum into the throat by means of a tube. The cauterizations with a saturated solution of sulphate of copper were repeated at night and the next morning. In the interval, insufflations alternately with alum and powdered tannin were repeated six to eight times during the day. Besides this I prescribed, and I lay much stress upon this point, that the child should be fed, should be made to take forcibly, if necessary, soup, chocolate, small cups of an infusion of coffee as an excitant and tonic, and at the same time I ordered some preparation of cinchona. When we come to speak of treatment, I shall tell you of the great importance I attach to alimentation, and my reasons for so doing.

Four days after the patient entered the ward, her condition was far from being improved. The ganglionary engorgement, which, from the first, made me prognosticate an unfavorable issue, was still greater, and comprised the cellular tissue of the cervical and submaxillary regions. A more alarming symptom had arisen; that is, an erysipelatous redness of the skin, as if a deep abscess of the parts existed. This erysipelatous redness, which Borsieri had pointed out, and which I shall have occasion to speak of again, does not ordinarily show itself except in cases of diphtheria of the very worst form.

The third day the nostrils were invaded. The evening before a slight redness was manifest at their inferior part, which increased so that the next day an abundant secretion was formed upon the surface of the pituitary membrane; a pseudo-membranous secretion, mixed with a small quantity of blood. The disease had extended to the nasal fossæ. This is a fatal symptom, for those in whom it is present almost invariably die; if not in the acute period of the disease, at least at a later stage.

Nevertheless, the cauterizations with the sulphate of copper were exactly and faithfully made, morning and evening; the insufflations of alum and tannin were repeated many times during the twenty-four hours, and the patient was fed as directed.

About the fourth day, the seventh of the disease, the aspect of the throat was satisfactory. The mucous membrane was almost freed from the exudation which covered it; the uvula was equally free; the tonsils, and the back of the pharynx, were almost completely so. But during the third day, several attacks of severe epistaxis oc urred, making the case still more dangerous, by adding this complication to the ganglionary engorgements and the nasal diphtheria. The child was very pale, and greatly prostrated. The first bleeding followed an injection of the sulphate of copper; the injections were, however, continued. After each injection, a considerable quantity of mucosities ran from the nostrils, and twice, real false membranous concretions were thrown off; one of which retained the form of the part from which it came.

With these severe symptoms before me, although the pharyngeal angina was cured, although I did not fear the propagation of the disease to the larynx, (the respiration continued perfectly pure,) I pre-

dicted a fatal termination, and I told you that the child would become more and more prostrated, which nothing would relieve; that we should soon see her refuse all kinds of food and drink, and that she would pass away in a syncope.

The event justified my predictions. The little patient grew cold like a cholera patient; she became subject to syncopes; the pulse was very feeble and slow, but the respiration remained free. We tried in vain to make her swallow something, however little it might be, and to overcome her disgust for food. Although the ganglionary engorgement was notably diminished; although the nose was better, no longer secreting that fœtid ichor which had before run from it; although the erysipelatous redness had itself disappeared; although in respect to the local manifestations there was an apparent, though deceitful, amelioration, the child died, poisoned by the diphtheritic virus which had infected it. She died in a syncope, upon turning over, after refusing some drink offered her by the nurse who attended her; she died as patients affected with malignant diphtheria often die.

At the autopsy, we did not find upon the mucous membrane of the pharynx any trace of false membranous concretion. Under the influence of the topical treatment, the detersion was complete, and the pillars of the veil of the palate, which were covered with a putrilaginous deposit, simulating gangrene, were intact. The tonsil occupied its ordinary place, and showed no lesion, no gangrenous alteration. This confirms what I told you in the preceding lecture of the false appearance of gangrene, which diphtheria so often assumes.

This is, gentlemen, an example of malignant diphtheria, progressing slowly; you have seen it assume a more terribly active form, in the case of another child which died three weeks since, in the same ward. I will call your attention to other cases.

One of our most regretted confrères of the hospitals, whose name is known to all, and whose works are in most of your hands, Valleix, attended a child affected with membranous angina. It was not a very severe case, and recovered, thanks to the energetic treatment employed by our unfortunate colleague. Examining one day the throat of this infant, Valleix received in his mouth a little saliva thrown off in a fit of coughing; he took the disease. The next day he perceived upon one of his tonsils a little pellicular concretion, followed by a slight fever; a few hours afterwards, both tonsils and the palate were covered with false membranes. Soon an abundant secretion of a serous fluid ran from his nose; the glands of his neck, the cellular tissue of that region, of the inferior part of the jaw, were considerably swollen; there was delirium, and in forty-eight hours Valleix died, without presenting any symptoms of disease of the larynx.

Recently one of our confrères in the country visited a patient sick with diphtheria and croup, and was obliged to perform tracheotomy. During the operation the blood obstructed the trachea, so that suffocation was feared. Our unfortunate confrère, anxious, applied his mouth to the wound of the neck, in order to suck the fluid out of the air-passage; he inoculated himself with the disease. Forty-eight hours

afterwards, like Valleix, he died from malignant angina, and, like him, with delirium and other symptoms which I have just related to you.

How many sad histories can be added to these! In the same manner, my colleague and friend, Dr. Blache, had the pain of losing his son, one of the most distinguished *internes* of our hospitals; a young man full of promise, in whom great mental capabilities were united to the most thorough instruction. Henry Blache was left by his uncle, Doctor Paul Guersant, in charge of a child upon whom he had just performed tracheotomy, for croup. He watched three nights, and at the end of the third he felt a slight sore throat, and returning home, mentioned it to his father. Doctors Legroux, Roger, and myself were immediately called; we found the unfortunate young man in a high fever, and the tonsils covered with false membranes. In a few hours, the swelling in the neck became enormous; the nasal flux commenced, and was incessant; and at the close of the first day, delirium set in; and seventy-two hours afterwards, notwithstanding the most energetic treatment, we saw our patient die, without presenting any laryngeal symptoms.

This is an example, gentlemen, of a particular form of diphtheria, which can be contracted by contact with an individual affected with diphtheria of the ordinary form, in the same manner that a confluent variola can be contracted by contact with a patient afflicted with discrete variola. In this terribly malignant form, the poisoning seems to be immediately general; and where the characteristic concretion commences to appear upon the tonsils, in the nasal fossæ, the whole economy is deeply affected. This severe form is fortunately the most infrequent; still, in certain epidemics, it becomes more common. From 1822 to 1844, there was not a single case; but within the last few years, I have seen more than twenty cases of it here in Paris. For example, in two families, where I was called to attend some members of them for ordinary diphtheritic angina, I saw several persons die of this severe form, which is never recovered from.

Four years since, in one of the most renowned families of France, five persons were attacked with this disease. Among the five, two had ordinary diphtheria; the other three, two children and the mother, died from the malignant form. You will find quite a large number of facts related in the reports upon the epidemics of malignant angina which prevailed in France during the last few years, and particularly in the report of Doctor Perrochaud upon the epidemic which raged in Boulogne-sur-mer, from January, 1855, to March, 1857.*

It seems that at different periods, diphtheria, like other epidemic diseases, prevails with particular characteristics; at other times, these characteristics are quite different; and then, again, they reappear under the same form they at first took on, undergoing thus different transformations, which are resumed at some other time.

I should remark here, gentlemen, that for several years we have passed through one of those epidemic periods in which the malignant

* Mémoires de l'Académie de Médecine, t. XXII., p. xci.

form of diphtheria is much more frequent than it had been up to that time; the disease, such as we observe to-day, is, in fact, very different from that which has been so clearly described by M. Bretonneau, and recalls the description of it which has come down to us from the physicians of the seventeenth century.

Let us study the slow form of malignant diphtheria, which you will have to treat oftener than the other most terrible form. Although this is very serious, more so than typhus or cholera, or yellow fever, you still can hope to save a few patients; as to the other form, that which snatched from us Valleix and Henry Blache, it kills most unmercifully.

The young girl whose history I have related to you is an example of the first.

Pellicular concretions appear upon one of the tonsils; often their appearance does not differ from that of the false membranes of ordinary diphtheritic pharyngeal angina; but sometimes, also, they have a special condition. Of a tawny yellow color, they rest upon tissues of a livid red color, and the parts are often œdematous. The patients complain of soreness of the throat, dryness, difficulty in swallowing, sometimes even before there is any membranous production, or even redness, or anything apparent upon any point whatever of the pharynx.

The fever is quite high; it is not always, however, much more so than in the simple form of the disease. But what is never wanting in this malignant form, that which is redolent of its pestiferous character, to use the expression of Mercatus, (pestiferi morbi naturam redolens,) is the ganglionary engorgement. It is considerable, and extends to the cellular tissue which surrounds the lymphatic glands. This sign, from the commencement of a frightful import, should arouse the fear that the disease is malignant in its character, and that it can resist all the therapeutical means that can be used to combat it.

The skin which covers the tumefied parts often takes on an erysipelatous redness, which we have noticed in our little patient, and which also has a very serious signification. This redness gives the impression of a deep abscess, which fact did not escape the observation of the older physicians. Permit me here again, gentlemen, to cite, as confirmatory of what I say, a passage from Borsieri: "*Nec rarum est*," says he in his chapter *De Angina Gangrenosa Maligna*, "in hujus modi morbo, præsertin cùm epidemice diffunditur, circà collum, pectus et brachia erumpere ruborem quandam erysipelatodem, sæpè cùm papulis morbillosis conjunctum aut exanthemata miliaria, papulasæ rubras in summam cutem alicubi prodire, quin iniò parotides ipsas glandulasæ maxillares jugularesæ tumefreri acdolore." In this quotation you find the ganglionary swelling of which I have spoken, that erysipelatous redness which I have pointed out; and you also find mentioned those miliary and rubeolic eruptions which perhaps have some analogy to the scarlatiniform, the erythematous, and pemphigoid eruptions, to which attention was called in a recent discussion at the Medical Society of the Hospitals, by my colleague, Dr. G. See.

I return to the ganglionary engorgement. This is particularly seen at the level of the angle of the jaw, and under the jaw itself; at first attacking the side corresponding to the part of the pharynx which was first invaded by the disease; the next day attacking the other side, because at that time the other side of the pharynx is also invaded. The diphtheritic exudation spreads more rapidly than it does in the ordinary form. Most frequently it covers a part of the veil of the palate; not infrequently it occupies the eustachian tube. You may recollect, as it occurred quite recently, the autopsy of the little girl who died of malignant diphtheria. She particularly complained of excessive pain in the ear, especially when she coughed. It is a fact that, in a great number of cases, diphtheria of the pharynx extends into the auditory canal, at the same time that, we were about to say, it extends into the nares. After twenty-four, thirty-six, and forty-eight hours, the nasal fossæ are invaded. The existence of concretions in these cavities is a serious circumstance, to which I have already directed your attention when speaking of the little patient of the ward St. Bernard. Remember it, gentlemen, for when it occurs, even in apparently the most benignant form, at its commencement you will rarely find such patients, whether children or adults, recover. Of all the manifestations of the disease, I have said, and repeat it, that which takes place upon the olfactory mucous membrane is the most alarming. Of twenty persons attacked with *nasal diphtheria*, nineteen die; while of twenty affected with croup, a certain number can be saved by tracheotomy, as I hope to demonstrate to you hereafter.

You may recollect the autopsy of a child who was four or five days in our wards. He was attacked with diphtheria in another hospital. When we saw him, he breathed with difficulty and loudly; a thin serosity, without fœtid odor, ran from the nares, and was incessant. There was high fever. At first sight I saw the severity of the case, and told you that the little patient was attacked with diphtheria, from which he would die. He, however, appeared still fresh and vigorous; but nasal diphtheria was present, and my experience had taught its serious import. Upon examining the throat, we ascertained the existence of pellicular concretions covering the uvula and both tonsils. Cauterizations with a concentrated solution of the sulphate of copper were made to the throat and nose, and insufflations of tannin and alum. Notwithstanding all this the child died, without evincing the least laryngeal symptom. Upon opening the body, we found very thin false membranous concretions upon the tonsils; the arytenoepiglottic ligaments presented traces of inflammation and a commencing plastic exudation, but no false membranes; no alteration was noticed in the larynx and trachea.

The child, then, did not die from croup, but from malignant diphtheria, and it was the presence of the characteristic exudations in the nasal fossæ which caused us to pronounce the fatal prognosis which was so soon realized.

How does this nasal diphtheria announce itself? You have seen it in the little girl who constitutes the subject of this lecture. At

first a redness is observed at the orifice of the nares—a redness analogous to that presented by any person having a coryza; the secretion from the pituitary membrane is increased, and the patient cleans his nose oftener than usual; the mucus secreted is slightly mixed with blood; most frequently there is at the same time an epistaxis. This *coryza*, when it appears in the course of a diphtheria, however slight it may be, is a serious symptom, for it indicates that the specific phlegmasia has invaded the nasal fossæ. In the course of twenty-four, thirty-six, or forty-eight hours, there is no longer any doubt; a sanious ichor, running in considerable quantity from the anterior nares, also falls backward into the throat; and you will find, upon examining the nose, either by opening the nostrils with the fingers or by means of a *speculum auris*, the mucous membrane lined with false membranes.

At the same time another symptom is hardly ever absent; that is, a weeping of the eyes, such as persons affected with lachrymal tumors, or an obliteration of the nasal canal, complain of. It is owing to the same cause—the nasal passage and the lachrymal canals being obstructed by the tumefaction of the mucous membrane which lines them. In some cases the diphtheritic inflammation and the false membranous concretions also extend from the nose to the eyes. It is not rare, in fact, to find, on turning over the eyelids, and particularly the inferior eyelid, the mucous membrane of the lid inflamed and covered with false membranous secretions, the specific inflammation having extended from the pharynx to the nasal fossæ, and from thence to the palpebral mucous membrane, by way of the nasal passages. This lesion of the lids is quite common, so much so that every year examples of it are seen at the Children's Hospital, principally in the malignant form of diphtheria which we are now studying.

These symptoms of nasal diphtheria, and of *diphtheritic ophthalmia*, have phases less severe in appearance than those of croup, so that the physician cannot help having some hopes of recovery, unless sad experience has taught him the lesson of their fatality. If he only takes into consideration the general phenomena—the slight febrile action, the absence of delirium—he cannot imagine that the state of feebleness, the ganglionary engorgements, can be such alarming symptoms; he will believe that when once the membranous exudations of the nose, or even those of the pharynx, have disappeared, there will be nothing more to fear. Under certain circumstances, notwithstanding their real severity, and although the termination of the disease is almost always fatal, some cases get well. Among those rare exceptions which I can report to you, the following is one which you have witnessed.

The case was a young boy, ten years and a half old, of a lymphatic temperament, with light hair and light complexion, and an intelligent face. He was brought here by his mother the first of September, 1855, and we at first diagnosticated a paralysis of the veil of the palate.

We were told that the disease commenced three weeks before, and followed another disease, which, from what was told us, was incontestably a buccal and nasal diphtheria.

In fact, from the very commencement, the child had complained of a sore throat, accompanied by swelling of the glands of the neck, which had not escaped the notice of his family. The invasion of the disease had been quite sudden, or at least the child had complained of it one day only, upon returning from school. He had then a high fever, and these symptoms continued forty-eight hours. During this time he threw off, through the mouth and nose, *white skin*, which his mother compared to pieces of flesh. These symptoms ceased spontaneously, without anything having been done for them. But two days afterwards they returned with the same characteristics, the child again expectorating and blowing from the nose these white skins. The family, rightly alarmed, feared that the child had the croup, though no one in the neighborhood was known to have had it. The child, however, did not cough; there was only a considerable difficulty in swallowing.

This disease lasted six days, and the convalescence was rapidly established, so that the little boy resumed his usual habits. Since then, he has exhibited symptoms which frighten his mother; they are a marked nasal tone and an impossibility to swallow without the drink returning immediately by the nose.

This was, then, a paralysis of the veil of the palate. Upon examining the throat, we ascertained that the membranous veil did not move in any manner during the act of respiration, and did not contract when we excited it with the end of a feather.

Again, the little patient said that he did not see as well as before he was taken sick; there was something like a mist before his eyes. The pupils, completely dilated, did not contract when the child was carried from the dark into bright daylight.

Finally, it seemed to us that he walked irregularly; but that was a phenomenon without much value, for we were told that this feebleness of the lower extremities had been observed for more than a year.

What was particularly observed by the family, was the sudden change in the character of the patient; from being gentle and quiet, he had become impatient and restless. The general health was in other respects very satisfactory. The urine was examined; it was of a pale color, slightly clouded by the addition of nitric acid and by heat. We recommended a tonic and substantial regimen. Unfortunately, we lost sight of this patient.

Thus, in this case, the nasal diphtheria was cured, and cured without the intervention of art.

Like examples, I repeat for the third time, are rare, exceedingly rare, and do not affect the general rule I have laid down. Notwithstanding the mildness of the general symptoms, the life of patients attacked by malignant diphtheria, attended with considerable ganglionary engorgements, and membranous exudations of the nasal fossæ, and palpebral conjunctiva, is seriously threatened.

Bleedings at the nose, I have told you, often precede the development of false membranes upon the pituitary mucous membrane; they are the most important premonitory sign, and continue even when the membranous exudation has lined almost the whole surface of the nostrils.

Our little girl lost in this way almost 100 grammes of blood, really a small quantity, and yet a few hours after this hæmorrhage, you have remarked a great pallor and deep discoloration of the skin. These bleedings from the nose have always been considered as very serious phenomena. "*Malignam significationem præbet sanguis stillans e naribus,*" said de Heredia, one of the authors who wrote upon the epidemics of malignant angina which prevailed in Spain at the commencement of the seventeenth century; and further on, he adds: "*Periculosissimus censetur sanguinis fluxus ex naribus aut ore.*" A French author, who also wrote about the gangrenous sore throats which he observed in Paris, in 1746, recognized the fact, that bleeding from the nose was a sign of great danger; and he states that in Picardy many children who presented this symptom died within nine days.

It is not, gentlemen, only the epistaxes which we observe, but *hæmorrhages of all kinds*, subcutaneous ecchymoses, enterorrhagia, hæmaturia, pneumorrhagia, &c. The following is a remarkable instance, which I extract from a work by Dr. Peter:*

"The first of August, 1858," says our confrère, "I was called from the Children's Hospital to see young Marie P——, living at No. 29 Rue de Sevres. This child had had a high fever for twenty-four hours, and a severe angina for ten hours. When I saw the patient I ascertained the existence of the tonsillary angina, and discovered a commencing scarlatinous eruption. The fourth day of the disease, the fever was increased, the patient coughed, and I recognized the existence of a pneumonia of the right side, an unusual complication in scarlatina. I prescribed Kermes mineral, and a blister to be applied to the chest.

"The next day, August 5th, a small membranous spot was developed upon each tonsil; the fever was intense; the scarlatinous eruption was of a violet color; the general condition presented all the characters of adynamia. I ordered cinchona, lemonade as a drink, and soup.

"The 7th the blister had ulcerated, and was covered with a membrane. The false membranes had increased in thickness and extent over the tonsils, and had reached the veil of the palate; they were of a grayish color, and emitted a fœtid odor. I sprinkled the surface of the blister with a mixture of powder of cinchona and camphor, and cauterized the throat with nitrate of silver, and prescribed lemonade as a drink.

"The 8th, the nose commenced to run, and at the orifice of the left nostril I perceived a rudimentary false membrane. The scarlatinous eruption was of a little less violet color, but the fever was intense. The blister, ulcerated at its borders, extended as the membrane which covered it thickened. The pneumonia, however, instead of being resolved, increased in extent; there was a souffle and bronchophony in the inferior half of the right lung.

"From the 9th to the 11th, the general condition was still aggra-

* Quelques Recherchés sur la Diphthérite. Paris, 1860.

vated. Here and there, a few sparse portions of the epidermis were detached upon the arms and legs, and the eruption had become slightly paler, but the fever remained high, and the patient exhaled a fœtid odor from the nose and mouth. The edges of the nostrils were excoriated. From these orifices ran an acrid fluid, which also excoriated the upper lip, and a false membrane could be seen lining the interior of the nasal fossæ. The whole pharynx was invaded by the false membranous product; the deglutition had become very difficult. Notwithstanding frequently repeated injections into the nose and throat, the fœtid odor persisted.

"The 12th, I found the symptoms of a commencing pneumonia upon the left side; upon the right I heard râles, which were almost gurgling; there was, besides, an abundant expectoration of purulent and fœtid sputa. A scarlatiniform eruption reappeared; the excoriations of the upper lip were covered with diphtheritic exudations. I observed upon the neck two bullæ of pemphigus.

"The 13th, these excoriated bullæ were already covered with false membrane; numerous *petechiæ, scorbutic ecchymosis*, appeared upon points subjected to pressure; there was *a hæmorrhage upon the surface of the blister, a bleeding at the nose, and the false membranes of the pharynx were infiltrated with blood.*

"The 14th, a few bloody sputæ indicated to me that there was a *pulmonary hæmorrhage;* there was also *hæmaturia entérorrhagia;* symptoms I had foreseen, and which I had warned the parents of the night before. The same day, as I expected, the voice changed, became hoarse; the false membranes had passed down into the larynx; at night, the voice was more decidedly croupal.

"The night was a most anxious one, and the patient died the morning of the 15th August, the fifteenth day from the beginning of the disease."

You will hardly find, gentlemen, a more complete or more sadly interesting case than this. If scarlatina had its influence in this case, the child died from diphtheria; from a very severe malignant diphtheria. The scarlatinous angina was the point of departure for the diphtheritic fluxion, and the pellicular disease closed the scene; either on account of its particular character, or because it found the sick person under the influence of a disease itself severe and septic; in a word, in such conditions as would engender a great malignancy, the diphtheria assumed a terrible form.

The *deep discoloration of the integuments*, the anæmic tint to which I call your attention, should not be solely attributed to the loss of blood, for this can be relatively slight and even be wanting, and yet the discoloration be present. This is, in fact, a constant and invariable phenomenon in the malignant form of diphtheria. It indicates the cachectic condition into which the individual has fallen, and a series of symptoms then appear which we are powerless to relieve; an anorexia which cannot be overcome, and which is observed in adults as well as in children. I have often tried to overcome it; I have tried all kinds of means; threats and even force have been used in young patients to make

them take food, but uselessly; they resisted everything; would take nothing; neither nourishment nor drink, and permitted themselves to die of hunger.

Then also the *skin became cold*, followed by an excessive agitation, or an *anxiety* painful to behold, recalling that witnessed in cholera patients, or again a kind of composure more startling even than the agitation. Finally, at a moment when least expected, if the patient rises suddenly to gratify a wish or to change a position, he dies as suddenly, in a syncope, which occurrence you saw take place in our little girl.

This unfortunate child, gentlemen, has offered to you a type of the destructive disease, the outlines of which I have endeavored to draw. Guard it well in your memory, for in the course of your practice you will unfortunately have too frequent occasion to meet similar cases.

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## EDITORIAL AND MISCELLANEOUS.

— Since our last issue, the profession of this city has been called upon to mourn the decease of another of its prominent members—D. MEREDITH REESE, M.D., LL.D. The position which Dr. Reese held in the profession for many years made his reputation as extensive as the country; few physicians were as widely and as favorably known as he. To many his death will be very unexpected, for his stout figure and his full-toned voice indicated the vigor of ripened manhood.

Dr. Reese was born early in the present century, so that his age at the time of his decease was not far from sixty. He graduated in Medicine in the University of his native State, Maryland, in the year 1819, and subsequently commenced the practice of his profession in Baltimore.

As a medical man, Dr. Reese was distinguished both as a teacher and writer.

As a teacher, he at several different periods occupied a Professorship in the Washington University of Baltimore, the Albany Medical College, the Castleton Medical College, and the New York Medical College. He occupied the Chair of the Practice of Medicine in the last-named institution at the time of his death. A fluent speaker, with an easy declamation and forcible manner, he was an agreeable teacher, and one who attracted the student.

As a writer he is equally as well known. He was, we believe, at the time of his death, the oldest editor of the medical press in this country. His writings, exclusive of his communications to his own

journal, were quite numerous, and were not confined to medical subjects. They all evince the energetic, enthusiastic character of the writer, and show as well the carelessness in style which naturally results from the rapidity with which he performed his literary labors.

Dr. Reese was greatly distinguished as a debater. There are very few remaining behind him in our ranks who can be in any degree compared to him in this respect. Bold, ready, with a tact which told him at each instant how far he had the sympathies of his audience; with an abundant vocabulary, and a mind sufficiently close in reasoning not to be wandering, and not so close as to be dull; with a command over his own resources which never failed him, and with a power to weave an argument which held the attention with curiosity at each step, and which surprised the reason at the subtle, though not at all times logical, argument at the close—with all these qualifications, he was by far the best extemporaneous debater on medical topics in our profession that we have ever heard.

In his late writings he was more inclined to polemics than to didactic essays, and often, by the free use of sarcasm, did much to offend individual members of our profession, and to eventually injure his own reputation.

His last sickness was somewhat painful; for several weeks he was unable to lie down for any length of time, on account of dyspnœa. He had for some time been suffering from a cardiac disease, which became more manifest during the early part of spring, and eventually led to a dropsical effusion into the lower extremities, which were so distended that the fluid escaped through the integuments. Mortification of the parts supervened, and tetanic symptoms finally developed themselves, which terminated his life the morning of May 13.

— Several works on Military Surgery have quite recently been issued from the press. The present number contains a brief notice of the little work by Prof. Gross, published by Messrs. Lippincott & Co. We have just received another from Messrs. Baillière Brothers, entitled "A Practical Treatise on Military Surgery," by Frank Hastings Hamilton, M D., an account of which we expect to give in our next issue. It is an octavo volume of about 240 pages, and in addition to the chapters on Military Surgery, contains two others: one on Dysentery, prepared by Prof. Austin Flint, and another on Scurvy, by Prof. B. W. Macready. The plan of the work we shall give hereafter. The price of the volume is $2.00. It is said a third work has been issued by a house in Cincinnati, and is the joint labor of Dr. C. S. Tripler, U. S. A., and Prof. George C. Blackman, of Cincinnati. We have not seen the volume, and therefore cannot speak of its content

The celebrated work of Dr. Lewis Stromeyer, Physician of the Royal Hanoverian Army, is being translated by a physician of this city. We hope to be able to give some chapters of this work in future numbers of the MONTHLY. The number of the American edition of the *Lancet* for the present month contains a chapter from Mr. Guthrie's pamphlet, on the Hospital Brigade, entitled "Directions to Army Surgeons on the Field of Battle." This constitutes the literature of military surgery for the present.

— *Hunt's Merchants' Magazine*, which we have received for some time past, although not falling strictly within the limits of subjects treated of in a medical journal, yet contains from time to time statistical articles upon branches of science so allied to medicine that it would fully repay the medical man to be more conversant with its pages. This Magazine has recently undergone an editorial change. The present editors are Mr. I. Smith Homans and Mr. William B. Dana. The numbers for May and June contain articles upon Fibrilla, or cottonized flax, which, if the statements made are realized, will make a great change in the agricultural and manufacturing products of this country. The Fibrilla is the fibre of flax prepared by recently invented machinery, so that it can be adapted to machine-spinning.

The difficulties which have heretofore prevented flax from being used in manufacturing purposes where cotton is now used, are stated to be overcome, and that now, flax prepared by the method indicated "can be either spun or woven on cotton or woolen machinery, mixed with either of those substances in smaller or large proportions." Various articles, such as stockings, satinet, &c., have already been made, and at a cost and finish such as warrants the belief "that it is destined to fill a highly important function in the economy of one of the most valuable and essential branches of human industry."

— Prof. Peaslee has recently tapped a patient with ovarian dropsy, and obtained *one hundred and thirty-five* (135) *pounds* of dropsical fluid. The abdominal circumference of the patient (a young lady) before the operation was *five feet and seven* (67) *inches*. If we mistake not, the quantity of fluid evacuated exceeds that of any other recorded case.

— The volumes of the New Sydenham Society's Publications for 1860 have arrived, and can be procured of the Secretary for New York, Dr. C. F. Heywood, No. 66 West Twentieth Street. The subscription for 1861 is due. Those who wish the volumes for the present year will send $6.00 to the Secretary, that their names may be forwarded to the home office.

— A new Medical School, recently chartered by the Legislature of this State, under the name of *Bellevue Hospital Medical College*, has been recently organized, with the following Faculty: Isaac E. Taylor, M.D., President and Professor of Obstetrics; Austin Flint, M.D., Professor of Theory and Practice of Medicine; J. R. Wood, M.D., Prof. Operative Surgery and Surgical Pathology; Benj. W. McCready, M.D., Prof. Materia Medica and Therapeutics; Frank H. Hamilton, M.D., Prof. Military Surgery and Pathology, and Accidents to Bones; Geo. T. Elliott, M.D., Prof. Obstetrics; Lewis A. Sayre, M.D., Prof. Orthopœdic Surgery; R. O. Doremus, M.D., Prof. Chemistry; J. W. S. Gouley, Prof. Anatomy and Microscopy; Stephen Smith, M.D., Prof. Principles of Surgery; B. Fordyce Barker, M.D., Prof. Obstetrics; A. B. Mott, M.D., Prof. Surgical Anatomy; Austin Flint, Jr., M.D., Prof. Physiology; C. Phelps, M.D., Demonstrator of Anatomy.

— We hope those who have been the recipients of the MONTHLY for the last year will not forget that a fair remuneration should be made us in return for the journal. Although the times are hard, the small sum due, when neglected to be paid by a large number of subscribers, embarrasses us, and makes our labors doubly difficult. We appeal to the honor of our delinquent subscribers to pay their subscriptions as promptly as they would any other debt. To owe for a medical journal should be the last complaint against one of the profession.

*Honoraria*.—The great incomes of a few physicians are made, not by the frequent receipt of *honoraria* of unusual magnitude, but by incessant labor, combined with the fact that the great reputation of these men enables them at all times to claim the highest fees permitted by custom. We read of Dr. Dimsdale receiving in 1768, from the Emperor of Russia, for inoculating the Empress and her son, a fee of £12,000, a pension for life of £500 per annum, and a title of nobility; of the Emperor Joseph of Austria, on his death-bed, making his physician, Quarin, a Baron of the Empire, and giving him an annual pension of £2,000; of Sir Astley Cooper, in one instance, receiving a fee of £1,000; of a provincial practitioner since Sir Astley Cooper's time, receiving a fee of £2,000; and better still, of another provincial practitioner, who very lately has been enriched by the gratitude of a patient who possessed no relatives, with a comfortable estate worth about £700 per annum. It is pleasant to learn that Sir Astley Cooper received annually for some time, £15,000, and that one year his receipts amounted to no less than £23,000; that Dr. Chambers' income reached nearly £9,000 per annum; and that in one particular

month he pocketed £1,100 in fees; that Dr. Baillie received in one year £11,000; and that to speak of some of the older physicians, Dr. Mead's income from practice amounted for several years to between 5,000 and £6,000; and Dr. Lettsom's receipts in one year reached £12,000. Dr. Fothergill's income, we may also add, averaged £6,700 during the last twenty-five years of his life. He, it is said, left a fortune of £80,000; yet he strove to banish "all thoughts," to use his own words, of practicing physic as a money-getting trade, with the same solicitude as he would the suggestions of vice or intemperance.

### *Rue and Savine in certain Metrorrhages.*

BY M. BEAU, OF THE HÔPITAL DE LA CHARITE.

M. Beau considers the abortive properties of rue and savine as very doubtful; but their effects, insignificant when the uterus is healthy, are very apparent in the pathological state. Rue is for the uterus what digitalis is for the heart, cantharides for the bladder, and belladonna for the muscular system. Still more, rue and savine succeed when secale cornutum has failed completely. These tonics are specially indicated when hæmorrhage is brought on by a pathological product, such as a fragment of placenta or some *débris* of the fœtus; but they may also be very advantageously employed when the uterus is unimpregnated, if it be the seat of complicated hæmorrhage, even in anæmia or chloro-anæmia. The following formula is recommended:

| | | |
|---|---|---|
| R.—Pulv. rutæ, centigrammes, | - | xv. |
| Pulv. sabinæ, " | - - | 51. |
| Syrup, - - - - - | | q. s. |

Six pills are made, one of which should be taken in the evening and morning. In anæmic females, Beau prescribes iron as soon as the hæmorrhage has ceased. He finds it of good service to add one or two centigrammes of powdered rue, daily, to the ferruginous proportions employed.—*Revue de Thérapeutique.* L. H. S.

— The Medical Directory for Great Britain, now for the first time published in a single volume, contains the names of more than 16,000 practitioners in various departments of the healing art. The pass lists of the examining bodies show that the yearly average of the additions to the licentiates in physic and surgery considerably exceeds one thousand.

— The meeting of the American Medical Association, which was to be held in Chicago this month, has, on account of the disturbed state of the country, been postponed until June, 1862.